

## **NAVY TRAINING SYSTEM PLAN**

**FOR THE** 

**AN/ASD-12(V)** 

# SHARED RECONNAISSANCE POD

N78-NTSP-A-50-0121/P

**SEPTEMBER 2003** 



#### **EXECUTIVE SUMMARY**

This Proposed Navy Training System Plan was developed to identify the life cycle manpower, personnel, and training requirements associated with the AN/ASD-12(V) Shared Reconnaissance Pod (SHARP). The SHARP system will replace the existing LA-610 Tactical Air Reconnaissance Pod System (TARPS) currently used on the F-14 Aircraft. In Fiscal Year (FY) 03, the F-14 began phase-out, as the role of the Navy's tactical reconnaissance aircraft transitions to the F/A-18F Super Hornet. The SHARP system will employ an organic, all-weather, day and night, manned, tactical air reconnaissance capability providing continuous and immediate intelligence support to the Battle Group Commander in the prosecution of independent, joint, or combined operations, as well as providing intelligence data for the security of those forces under his/her command.

The SHARP program is an Acquisition Category III program and is currently in the System Development and Demonstration phase of the Defense Acquisition System, approaching Milestone C. Developmental Test is in its early stages and is being conducted at NAVAIR Patuxent River, Maryland.

The SHARP components are of a Non-Developmental design consisting of modified Commercial and Non-Developmental Item equipment provided by the Raytheon Corporation and Recon/Optical Incorporated.

Navy F/A-18F Combat Capable Weapons Sensor Officer personnel with Navy Officer Billet Classification (NOBC) 1321 operate and monitor the reconnaissance data collection onboard the aircraft.

Maintenance of the SHARP system will be performed at three levels: organizational, intermediate, and depot. Aviation Electronics Technicians (AT) and Photographer's Mates (PH) with Navy Enlisted Classification (NEC) 8841 or 8341 will perform organizational level maintenance. Intermediate level maintenance be will performed by AT personnel who will be assigned a new NEC, 66XX, SHARP Intermediate Maintenance Technician. Civilian personnel at organic and/or contractor facilities will perform depot level maintenance.

The SHARP program anticipates making maximum use of the existing F-14 TARPS infrastructure and billet structure to provide the SHARP capability to the F/A-18F. Current F-14 instructors will be utilized to support SHARP training. An analysis of organizational manpower requirements was performed by AIR 3.4.1. Results indicate that manpower requirements are less than those required for organizational level maintenance of the predecessor system, the F-14 TARPS. Because the intermediate level SHARP repair skill must be available to support repairs of equipment failures, the requirement will create the need for an increase of one technician per intermediate level SEAOPDET.



Training for aircrew and organizational level maintenance personnel will be modified to reflect the SHARP integration. Follow-on training for intermediate level maintenance AT personnel will be accomplished by developing a new SHARP maintenance training course, *C-XXX-XXXX*, *SHARP Intermediate Maintenance Technician Pipeline*. Training for Photographer's Mate (PH) and Intelligence Specialist (IS) reconnaissance imaging and interpretation personnel will be unaffected by the SHARP integration and no changes are reflected in this NTSP at this time.



## TABLE OF CONTENTS

ART I -	TECHNICAL PROGRAM DATA
A.	Nomenclature-Title-Program
B.	Security Classification
C.	Manpower, Personnel, and Training Principals
D.	System Description.
E.	Developmental Test and Operational Test
F.	Aircraft and/or Equipment/System/Subsystem Replaced
G.	Description of New Development
Н.	Concepts
	<ol> <li>Operational</li> <li>Maintenance</li> <li>Manning</li> <li>Training</li> </ol>
I.	Onboard (In-Service) Training
J.	Logistics Support
K.	Schedules
L.	Government-Furnished Equipment and Contractor-Furnished Equipment Training Requirements
M.	Related NTSPs and Other Applicable Documents
PART II -	BILLET AND PERSONNEL REQUIREMENTS
PART III	- TRAINING REQUIREMENTS
PART IV	- TRAINING LOGISTICS SUPPORT REQUIREMENTS
PART V -	MPT MILESTONES
DADT VI	- DECISION ITEMS/ACTION REQUIRED



#### LIST OF ACRONYMS

AIMD Aircraft Intermediate Maintenance Department AMTCS Aviation Maintenance Training Continuum System

AO Aviation Ordnanceman

AT Aviation Electronics Technician

ATARS Advanced Tactical Airborne Reconnaissance System

BIT Built-In Test

CAI Computer-Aided Instruction

CANDI Commercial And Non-Developmental Item

CAU Cold Air Unit

CBT Computer-Based Training

CNATT Center for Naval Aviation Technical Training

CNO Chief of Naval Operations
COMLANTFLT COMPACFLT Commander, Atlantic Fleet
Compact Commander, Pacific Fleet

CVIC Aircraft Carrier Intelligence Center

DT Developmental Test

ECS Environmental Control System

EMD Engineering and Manufacturing Development

EOT Electro-Optical Tester

FMS Foreign Military Sales

FY Fiscal Year

HPRR Human Performance Readiness Review

IS Intelligence Specialist

JSIPS Joint Service Imagery Processing System

LP Low Pressure

MTIP Maintenance Training Improvement Program

MTS Maintenance Trainer Set
MTU Maintenance Training Unit



#### LIST OF ACRONYMS

NA Not Applicable

NAF Naval Aviation Facility

NAMTRAU Naval Air Maintenance Training Unit

NAS Naval Air Station

NATOPS Naval Aviation Training and Operating Procedures Standardization

NAVAIR Naval Air Systems Command NEC Navy Enlisted Classification NTSP Navy Training System Plan

OEM Original Equipment Manufacturer

OPO OPNAV Principal Official

OT Operational Test

PAO Polyalphaolephin

PCMCIA Personal Computer Memory Card International Association

PH Photographer's Mate
PMA Program Manager, Air
PSE Peculiar Support Equipment

PTT Part Task Trainer

QRA Quick Response Assessment

RFI Ready For Issue RFT Ready For Training

SEAOPDET Sea Operational Detachment

SERE Survival, Evasion, Resistance, and Escape

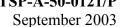
SHARP Shared Reconnaissance Pod SMS Stores Management System

TARPS Tactical Air Reconnaissance Pod System

TBD To Be Determined TD Training Device

TOFT Tactical Operational Flight Trainer
TTE Technical Training Equipment

VF Fighter Squadron





## LIST OF ACRONYMS

VFA Strike Fighter Squadron

WRA Weapon Replaceable Assembly

WSO Weapons Sensor Officer WTT Weapons Tactics Trainer



#### **PREFACE**

This Proposed Navy Training System Plan (NTSP) for the AN/ASD-12(V) Shared Reconnaissance Pod (SHARP) program has been developed to comply with the guidelines set forth in the Navy Training Requirements Documentation Manual, OPNAV Publication P-751-1-97. This NTSP was developed to update the Draft NTSP N78-NTSP-A-50-0121/D, dated January 2002, incorporating comments received. The comments incorporated served to clarify the training concept.



#### PART I - TECHNICAL PROGRAM DATA

#### A. NOMENCLATURE-TITLE-PROGRAM

- 1. Nomenclature-Title-Acronym. AN/ASD-12(V) Shared Reconnaissance Pod (SHARP)
  - 2. Program Element. 0305207N

#### **B. SECURITY CLASSIFICATION**

1.	System Characteristics	Unclassified
2.	Capabilities	Unclassified
3.	Functions	Unclassified

#### C. MANPOWER, PERSONNEL, AND TRAINING PRINCIPALS

OPNAV Principal Official (OPO) Program Spons	sor CNO (N78)
OPO Resource Sponsor	CNO (N78C1)
Developing Agency	NAVAIR (PMA265)
Training Agency	COMLANTFLT (N72) COMPACFLT (N70) CNATT FID (N5)
Training Support Agency	NAVAIR (PMA205)
Manpower and Personnel Mission Sponsor	
Director of Naval Education and Training	CNO (N00T)

#### D. SYSTEM DESCRIPTION

1. Operational Uses. The current tactical reconnaissance aircraft is the F-14 configured with the Tactical Air Reconnaissance Pod System (TARPS), equipped with film sensors designed to operate both day and night, in clear weather conditions only. The AN/ASD-12(V) SHARP system will employ an organic, all-weather, day and night, manned, tactical air reconnaissance capability, providing continuous and immediate intelligence support to the Battle



Group Commander in the prosecution of independent, joint, or combined operations, as well as providing intelligence data for the security of those forces under his/her command. SHARP will support the following operational tasks:

- ° Precision Strike
- ° Maritime Surveillance
- ° Target Acquisition and Reporting
- ° Pre-Strike Reconnaissance Targeting
- ° Suppression of Enemy Air Defense
- ° Battle Damage Assessment
- ° Order-of-Battle Maintenance
- ° Targeting Monitoring
- ° Surveillance of Special Areas of Lines of Communication
- ° Indications and Warning
- ° Drug Interdiction
- ° Combat Search and Rescue
- Map Supplementing
- ° Treat Verification
- ° Humanitarian (Disaster Relief).
- **2. Foreign Military Sales.** Australia may be considered for Foreign Military Sales (FMS) for the SHARP program. Multi-platform application is being considered. For further information regarding FMS or other platform applications, contact the Developing Agency, Naval Air Systems Command (NAVAIR) Program Manager, Air (PMA) 265.
- **E. DEVELOPMENTAL TEST AND OPERATIONAL TEST.** Developmental Test (DT) is in its early stages and is being conducted at NAVAIR Patuxent River, Maryland. Successful tests have been completed with an empty prototype pod. A demo flight test program of eight flights and an Environmental Control System (ECS) Risk Reduction flight test of six flights have occurred. Engineering and Manufacturing Development (EMD) pods have been lab and ground tested. EMD pods integration flight tests and carrier suitability tests began in November 2002. Early flight-testing has been with medium altitude sensors. High altitude sensors began flight-testing in February 2003. Most of the Weapon Replaceable Assemblies (WRAs) used in SHARP are Commercial And Non-Developmental Items (CANDI), requiring no DT or Operational Test (OT) on the hardware itself. Testing is required for installation and integration onto the aircraft. A Quick Response Assessment (QRA) was conducted by, Air Test and Evaluation Squadron Nine (VX-9) at China Lake, California. The QRA was completed in February 2003. Technical Evaluation (TECHEVAL) is being conducted by NAVAIR Patuxent River and China Lake. This TECHEVAL began January 2003. Operational Evaluation (OPEVAL) is scheduled to begin in early February 2004.

I-2



**F. AIRCRAFT AND/OR EQUIPMENT/SYSTEM/SUBSYSTEM REPLACED.** The SHARP system will replace the existing TARPS currently used on the F-14 Aircraft. The F-14 is beginning phased-out in Fiscal Year (FY) 03, as the role of the Navy's tactical reconnaissance aircraft transitions to the F/A-18F Super Hornet. SHARP will have no impact on Marine Corps use of the Advanced Tactical Airborne Reconnaissance System (ATARS) on the F/A-18C/D Aircraft.

#### G. DESCRIPTION OF NEW DEVELOPMENT

- 1. Functional Description. Depending on the operational requirements of the sensor suite(s) selected, the SHARP system will be capable of optimum performance to 40,000 feet and above altitude aboard the carriage aircraft, under clear to hazy weather conditions, day or night. SHARP will utilize electro-optical, infrared, and radar sensors to provide digital imaging in a hostile environment. Via data link, it will present information and imagery obtained on tactical targets to a Joint Services Imagery Processing System (JSIPS) station afloat or ashore to allow for real-time reconnaissance data interpretation. Communication between the SHARP pod and the F/A-18F Super Hornet is via the 1760 Multiplex Bus.
- **2. Physical Description.** The SHARP Pod design is based on the shape and size of the 330-gallon auxiliary fuel tank. The SHARP Pod is mounted to the SUU-73 Pylon on the aircraft center line on Weapon Station 6 using standard adapter equipment to interface with the BRU-32 bomb rack mounted to the large, raised, dorsal strong-back that extends along the upper third of the pod.

SHARP is composed of seven primary subsystems:

- ° Data Link
- ° Sensor
- ° Environmental Control System (ECS)
- ° Power Distribution
- ° Data Storage
- Navigation
- ° Personal Computer Memory Card International Association (PCMCIA) Interface

The ECS subsystem, separate from the F/A-18F ECS system, circulates liquid coolant throughout the pod to regulate internal temperature as well as maintaining the pressure and humidity within the pod. Ram air flow (in-flight) or an alternate (ground) source of low pressure air must be applied to the ECS compressor section to drive the primary cold air unit turbine and thermally stabilize the sensor optics.



The following are dimensions and physical characteristics of the SHARP Pod:

- **3. New Development Introduction.** The SHARP is being procured through new production.
- **4. Significant Interfaces.** The SHARP ECS requires a stable air source to properly operate and cool the pod while on deck afloat and ashore. Shipboard modification requirements have been evaluated and are determined to be a 50-foot hose connected between a deck edge or hanger deck Low Pressure (LP) air standpipe and the SHARP Secondary Cold Air Unit (CAU) snap fitting on the pod. LP air drives the Secondary CAU, which powers the Primary ECS Turbine to cool the pod. A POA Chiller Cart will perform shore-based cooling. Built-In Test (BIT) checking the pod off-aircraft would also negate the requirement for applying cooling to the aircraft.

SHARP will provide digitally formatted data via an internal data link to a ground or ship based JSIPS station for processing, exploitation, and report generation and dissemination. Upon return from the mission, the data will be downloaded from the airborne Data Transfer Cartridge and transported to the Tactical Input Segment (TIS) for playback, evaluation, and exploitation of reconnaissance collection, battle damage assessment, and future mission planning.

**5.** New Features, Configurations, or Material. The SHARP does not feature a technological breakthrough but utilizes advanced technology and proven hardware.

#### H. CONCEPTS

- 1. Operational Concept. The SHARP imagery is displayed on the center display of the aft cockpit Multipurpose Color Display of the F/A-18F Aircraft, and is operated and monitored by the Weapons Sensor Officer (WSO). SHARP imagery is currently planned to be a series of imagery frames displayed for two to five seconds. In addition to the imagery, the sensor status and BIT information is also displayed within the video. This provides full diagnostic capability for SHARP without having a complex interface with the aircraft mission computer.
- **2. Maintenance Concept.** SHARP is planned to employ the traditional three level maintenance approach.
- **a. Organizational.** Organizational level maintenance of SHARP is limited to servicing, testing, and limited corrective maintenance of the pod. Servicing consists of routine uploading and downloading of the pod, thermally conditioning the pod when required, checking and replacing desiccant cartridges, and corrosion checks. Fault detection is accomplished by an



initiated BIT using the aircraft or the Electro-Optical Pod Tester, inspection of proper operation and condition of the revolving sensor window, the reading and extraction of maintenance PCMCIA cards that contain BIT and Maintenance History Data, and the installation (preflight) and removal (postflight) of the solid-state memory brick. Failed Digital Storage Cartridges (DSC) and PCMCIA cards can be removed and replaced as part of organizational level corrective maintenance.

- (1) **Preventive Maintenance.** Preventive maintenance primarily consists of cleaning, corrosion control, and checking and replacing desiccant cartridges. Preventive maintenance will be performed in accordance with applicable F/A-18F Maintenance Requirements Cards and NAVAIR 01-1A-509.
- (2) Corrective Maintenance. Corrective maintenance is limited to using BIT to determine system failure and the removal and replacement of the pod. Removed pods will be inducted into the Intermediate Maintenance Activity for repair.
- **b.** Intermediate. Fault isolation of the pod WRAs and components will be determined by detailed complex diagnostics of the pod using the Electro-Optical Tester (EOT). Repair and maintenance of the pod consists of the removal and replacement of faulty WRAs, configuring the pod with High or Medium Altitude Sensors as required, and servicing the Polyalphaolephin (PAO) liquid cooling loop. Once faults are isolated and faulty components are replaced, the pod will be tested and verified Ready For Issue (RFI) using the EOT.
- **c. Depot.** The Original Equipment Manufacturer (OEM) will perform all maintenance and repairs beyond the capability of the intermediate maintenance level. Though organic depot maintenance capability is currently unfunded, it is expected that SHARP will probably utilize a combination of organic and OEM depots.
- **d. Interim Maintenance.** Raytheon Technical Systems is providing interim intermediate maintenance support. Current support is limited to the removal and replacement of the faulty WRAs to restore the system to operational readiness as quickly as possible. Intermediate level maintenance support is performed by a Raytheon Technical Representative and involves fault verification of failed WRAs utilizing the EOT. The OEM will provide interim organizational and depot level support during DT and OT. Other contracts for interim support may be established.

The Material Support Date is currently scheduled for March 2006 and Navy Support Date is scheduled for March 2007. Replacement parts required to support the interim maintenance of SHARP will be locally stored and managed by the Raytheon Technical Representative.

**e.** Life Cycle Maintenance Plan. The life cycle maintenance for the SHARP has not yet been determined. When life cycle maintenance information becomes available it will be included in updates to this document.

I-5



**3. Manning Concept.** The SHARP program anticipates making maximum use of the existing F-14 TARPS infrastructure and billet structure to provide the SHARP capability to the F/A-18F. Current F-14 Instructors will be utilized to support SHARP training. An analysis of organizational manpower requirements was performed by AIR 3.4.1. Results indicate that manpower requirements are less than those required for the organizational level maintenance of the predecessor system, the F-14 TARPS. Because the intermediate level SHARP repair skill must be available to support repairs of equipment failures, the requirement will create the need for an increase of one technician per intermediate level SEAOPDET.

A new Navy Enlisted Classification (NEC), 66XX, SHARP Intermediate Maintenance Technician, will be established for personnel who perform intermediate level maintenance. F-14 TARPS instructor billet infrastructure will be utilized to deliver courseware. SHARP does not increase the instructor billets at this time, however a second intermediate level training site may be stood up at NAMTRAGRU MTU 1038 Lemoore. When and if the decision is made to stand up the second intermediate level training site, the required information will be included in revisions to this NTSP.

**a.** Estimated Maintenance Man-Hours per Flight Hour. The SHARP technical parameter threshold values derived from the SHARP Operational Requirements Document for system reliability, availability, and repair times are as follows:

PARAMETER	THRESHOLD	OBJECTIVE
Operational Availability	70%	85%
Mean Flight Hours Between Operational Mission Failures SHARP Without Datalink	20.0 hours	60.0 hours
Mean Flight Hours Between Operational Mission Failures SHARP With Datalink	14.0 hours	42 hours
Mean Corrective Maintenance Time for Operational Mission Failures	3.5 hours	2.5 hours
Mean Flight Hour Between Unscheduled Maintenance Action	4.0 hours	10.0 hours
Built-In Test (BIT) Fault Detection Rate	75%	94%
BIT Fault Isolation Rate	75%	94%
Mean Flight Hour Between False BIT Indication	8.0 hours	15 hours
Mean Time to Configure Aircraft to/from Reconnaissance	1.0 hour	0.75 hours



**b. Proposed Utilization.** SHARP will be required to operate day and night, and in inclement weather conditions throughout mission duration, or as selected by the operator.

#### c. Recommended Qualitative and Quantitative Manpower Requirements

(1) Aircrew. There are no anticipated changes in Aircrew manpower requirements. Aircrew requirements consist of the Pilot and the WSO.

#### (2) Maintenance

(a) Organizational. The additional organizational level workload generated by SHARP is considered to be minimal, consisting of upload and download, system checkout, and checking and replacing desiccant cartridges. Aviation Electronics Technician (AT) and Photographer's Mate (PH) personnel in Work Center 240 are currently performing these functions in the F-14 community on the TARPS pods. Based on an assessment of the total workload of Work Center 240, per information provided by PMA265, initial estimates indicate that to support SHARP organizational maintenance functions, each F/A-18F squadron will require the following additional billets:

BILLET	NOBC/NEC	QUANTITY
Photo Officer (Directed billet)	6470	1
PH2	8341	1
PH3	8841	1
PHAN	8841	2
AT3	8841	1

One Aviation Ordnanceman (AO) with NEC 8341 or 8841 (billet currently existing) will be required as a Safety Supervisor during the upload and download of the pod and to arm and de-arm the BRU-32 Bomb Rack. This does not represent an increase in the current AO manning in the F/A-18F activities.

**(b) Intermediate.** Intermediate level maintenance will transfer to Sea Operational Detachment (SEAOPDET) personnel aboard ship and Aircraft Intermediate Maintenance Department (AIMD) personnel ashore after the interim intermediate maintenance support period. Because the intermediate level SHARP repair skill must be available to support repairs of equipment failures, the requirement will create the need for an increase of one technician per intermediate level SEAOPDET. It is estimated that each F/A-18F SEAOPDET



will require two AT2s, NEC 66XX, and one ATAN, NEC 0000; and each AIMD require one AT1, NEC 66XX, and two AT2s, NEC 66XX permanent party to support SHARP intermediate level maintenance functions.

**(c) Depot.** OEM personnel will perform all maintenance beyond the capability of the intermediate level. Long term planning includes organic personnel performing maintenance at the depot level.

(3) Reconnaissance Imaging and Interpretation. The additional reconnaissance imaging and interpretation level workload generated by SHARP is considered to be minimal. These functions are currently being performed by Photographer's Mate (PH) and Intelligence Specialist (IS) personnel in the Aircraft Carrier Intelligence Center (CVIC) afloat and the Fleet Intelligence Center (FIC) ashore. At the time of this NTSP no additional requirement in manpower is necessary. To support SHARP imagery functions, it is estimated that each CVIC and FIC operating JSIPS will require:

BILLET	NOBC/NEC	QUANTITY
Intelligence Officer (directed billet)	163X	1
РН3	8193	1
PHAN	0000	1
IS2	3925	1
IS2	3926	1

**Note:** The above billets are currently in place at the CVIC and do not represent an increase in manning.

**4. Training Concept.** To ensure a well-defined training program is available for integrating the SHARP system into the F/A-18F community, training for aircrew and the training curriculum for organizational level maintenance personnel will be modified to reflect the SHARP integration. Follow-on SHARP intermediate maintenance training for AT personnel will be accomplished by developing a new, stand alone SHARP maintenance training course, *C-XXX-XXXX*, *SHARP Intermediate Maintenance Technician*. Training for PH and IS reconnaissance imaging and interpretation personnel will be unaffected by the SHARP integration and no changes will be reflected in this NTSP at this time.

The established training concept for most aviation maintenance training divides "A" School courses into two or more segments called *Core* and *Strand*. Many, organizational level



"C" School courses are also divided into separate *Initial* and *Career* training courses. "A" School *Core* courses include general knowledge and skills training for the particular rating, while "A" School *Strand* courses focus on the more specialized training requirements for that rating and a specific aircraft or equipment, based on the student's fleet activity destination. *Strand* training immediately follows *Core* training and is part of the "A" School. Upon completion of *Core* and *Strand* "A" Schools, graduates going to organizational level activities attend the appropriate *Initial* "C" School for additional specific training. *Initial* "C" School training is intended for students in paygrades E-4 and below. *Career* "C" School training is provided to organizational level personnel, E-5 and above, to enhance skills and knowledge within their field. "A" School graduates going to intermediate level activities attend the appropriate intermediate level "C" School. Intermediate level "C" Schools are not separated into *Initial* and *Career* courses.

a. Initial Training. The Boeing Company and the Raytheon Technical Systems Company will provide factory training to aircrew personnel utilizing Grey Book data extracted from DT and OT. Boeing will provide organizational maintenance factory training to AT and AO personnel. Aircrew and organizational maintenance training was completed in second quarter FY03. Raytheon will provide intermediate maintenance training to AT personnel, and provide a Technical Representative to augment SEAOPDET personnel in off-aircraft maintenance. Initial intermediate maintenance training is expected to begin in November / December 2003. Instructor cadre initial training curriculum as applied to SHARP has not been developed as of the date of this NTSP.

Title ...... F/A-18F SHARP Aircrew Familiarization

Description ........ This course provides SHARP initial training to cadre and

instructor F/A-18F Pilot and WSO personnel.

Location ...... Contractor facilities

Length ...... 5 days

RFT date ...... January 2003 (complete)

TTE/TD ..... SHARP

Prerequisites ....... Qualified F/A-18F Pilot or WSO

Title ...... F/A-18F SHARP Organizational Maintenance

Description ....... This course provides SHARP initial organizational level

maintenance training to instructor and cadre maintenance

personnel.

Location ...... Contractor facilities



Length ..... 5 days

RFT date ...... January 2003(complete)

TTE/TD ..... SHARP

Prerequisites ...... ° C-100-2020, Avionics Common Core Class A1

° C-100-2018, Avionics Technician Organizational Level

Class A1

Title ...... SHARP Intermediate Maintenance

Description ....... This course provides SHARP initial first degree,

intermediate level maintenance training to instructor and

cadre maintenance personnel.

Location ...... Contractor facilities

Length ..... 5 days

RFT date ...... January 2003(complete)

TTE/TD ..... SHARP

Prerequisites ....... ° C-100-2020, Avionics Common Core Class A1

° C-100-2018, Avionics Technician Intermediate Level

Class A1

#### b. Follow-on Training

(1) F/A-18E/F Aircrew Training Courses. SHARP training will be incorporated into the following F/A-18 aircrew training. The incorporation of SHARP training will increase the course length by approximately 3.5 hours.

CIN	TITLE	LENGTH	MODEL MANAGER
E-2A-061X	F/A-18E/F Fleet Replacement Pilot Category I	257 days	VFA-122
E-2A-062X	F/A-18E/F Fleet Replacement Pilot Category II	215 days	VFA-122
E-2A-063X	F/A-18E/F Fleet Replacement Pilot Category III	169 days	VFA-122
E-2A-064X	F/A-18E/F Fleet Replacement Pilot Category IV	36 days	VFA-122



Title

CIN	TITLE	LENGTH	MODEL MANAGER
E-2D-181X	F/A-18E/F Combat Capable Weapons Sensor Officer Training Category I	229 days	VFA-122
E-2D-182X	F/A-18E/F Combat Capable Weapons Sensor Officer Training Category II	215 days	VFA-122
E-2D-183X	F/A-18E/F Combat Capable Weapons Sensor Officer Training Category III	169 days	VFA-122
E-2D-184X	F/A-18E/F Combat Capable Weapons Sensor Officer Training Category I	36 days	VFA-122

**(2)** F/A-18E/F Organizational Maintenance Training Courses. The following F/A-18E/F organizational level training will be updated to include SHARP. When included, SHARP training will add approximately 8 hours Lab/Training Device and 8 hours Theory/Computer-Aided Instruction (CAI) to the maintenance courses.

11110	Maintenance
CIN	E-102-0623
Model Manager	MTU 1038 NAMTRAU Lemoore

Description...... This track provides training to the first tour Aviation

Electronics Technician, including:

° Fire Control Systems

° Communication and Navigation Systems

F/A-18F/F Avionics Systems (Initial) Organizational

° Identification System

° Countermeasure System

° SHARP (to be added)

° Test and Support Equipment

° Publications and Safety Procedures

Upon completion the graduate will be able to perform organizational maintenance on the F/A-18E/F under direct supervision.

Delivery Method.. A blend of 132 hours Practical Application Lab and 231

hours Classroom Theory with SHARP included



Location ...... MTU 1038 NAMTRAU Lemoore

Length...... Currently 81 days; 83 days with SHARP included

RFT date ..... Currently available

Skill identifier..... AT 8841

TTE/TD..... ° TD-05 Avionics System Maintenance Trainer Set (MTS)

° F/A-18E/F Avionics Systems

Prerequisite ......... ° C-100-2020, Avionics Common Core Class A1

° C-100-2018, Avionics Technician O-Level Class A1

Title ...... F/A-18E/F Avionics Systems (Career) Organizational

Maintenance

CIN ..... E-102-0624

Model Manager.... MTU 1038 NAMTRAU Lemoore

Description....... This track provides training to the second tour Aviation

Electronics Technician, including:

° Advanced Theory, Operation, Testing, and

Troubleshooting

° Fire Control Systems

° Communication and Navigation Systems

° Identification System

° Countermeasure System

° SHARP (to be added)

° Test and Support Equipment

° Publications and Safety Procedures

Upon completion the graduate will be able to perform organizational maintenance on the F/A-18E/F Avionics

Systems under limited supervision.

Delivery Method.. A blend of 42 hours Practical Application Lab and 146

hours Classroom Theory with SHARP included

Location ...... MTU 1038 NAMTRAU Lemoore

Length...... Currently 39 days; 41 days with SHARP included

RFT date ..... Currently available

Skill identifier..... AT 8341



TTE/TD..... ° TD-05 Avionics System MTS

° F/A-18E/F Avionics Systems

Prerequisite ......... ° C-100-2020, Avionics Common Core Class A1

° C-100-2018, Avionics Technician Organizational Level

Class A1

° E-102-0623, F/A-18 E/F Avionics System (Initial)

Organizational Maintenance

The initial and career armament systems training listed below will have SHARP included, but will not cause a change to course length.

CIN	TITLE	LENGTH	MODEL MANAGER
E-646-0642	F/A-18E/F Armament Systems (Initial) Organizational Maintenance	30 days	MTU 1038 NAMTRAU Lemoore
E-646-0644	F/A-18E/F Armament Systems (Career) Organizational Maintenance	11 days	MTU 1038 NAMTRAU Lemoore

The SHARP intermediate maintenance training listed below is being developed as a stand-alone course. F-14 TARPS instructor billet infrastructure will be utilized to deliver courseware. SHARP does not increase the instructor billets at this time however a second intermediate level training site may be stand up in NAMTRAGRU Lemoore. Updates in training sites will be included in revisions to this NTSP.

Title ...... SHARP Intermediate Maintenance Technician

CIN ...... C-XXX-XXXX

Model Manager.... MTU 1039 NAMTRAU Oceana



Description	This course will provide training to the Aviation
	Electronics Technician, including:

- ° Testing and Troubleshooting Procedures
- ° SHARP System Operation and Maintenance
- ° Radio Frequency Theory
- ° Environmental Control Systems
- ° Imaging in Electro-Optical and Infrared Spectrums
- ° Reconnaissance Theory
- ° Safety

Upon completion, the graduate will be able to perform as a SHARP Intermediate Maintenance Technician in a shop environment under limited supervision.

Delivery Method.. A blend of Practical Application Lab and Classroom

Theory

Location ...... MTU 1038 NAMTRAU Lemoore

RFT date ..... October 2003

Skill identifier ..... AT 66XX (E-3 through E-7)

TTE/TD..... ° EOT

° SHARP

Prerequisite ........ ° C-100-2020, Avionics Common Core Class A1

° C-100-2017, Avionics Technician Intermediate Level A1

#### c. Student Profiles

SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
AT 8341	° C-100-2020, Avionics Common Core Class A1 ° C-100-2018, Avionics Technician Organizational Level Class A1 ° E-102-0623, F/A-18E/F Avionics System (Initial) Organizational Maintenance
AT 8841	° C-100-2020, Avionics Common Core Class A1 ° C-100-2018, Avionics Technician Organizational Level Class A1



SKILL IDENTIFIER	PREREQUISITE SKILL AND KNOWLEDGE REQUIREMENTS
AT 66XX	° C-100-2020, Avionics Common Core Class A1 ° C-100-2017, Avionics Technician Intermediate Level Class A1

**d. Training Pipelines.** Not Applicable (NA)

#### I. ONBOARD (IN-SERVICE) TRAINING

- 1. Proficiency or Other Training Organic to the New Development. Proficiency training under consideration would be accomplished through the use of SHARP training system Computer-Based Training (CBT) lessons for intermediate maintenance level personnel. If approved, CBT lessons will be developed and distributed in CD-ROM format to all F/A-18F activities receiving SHARP, NAVAIR Patuxent River, and Naval Air Facility (NAF) Atsugi, Japan.
- **a. Maintenance Training Improvement Program.** SHARP will not use the Maintenance Training Improvement Program (MTIP). SHARP will adopt the Aviation Maintenance Training Continuum System (AMTCS) concepts, which are replacing the MTIP. AMTCS is scheduled to begin full implementation for fleet deployment in FY04.
- b. Aviation Maintenance Training Continuum System. AMTCS will provide career path training to the Sailor and Marine from their initial service entry to the end of their military career. AMTCS concepts will provide an integrated system that will satisfy the training and administrative requirements of both the individual and the organization. The benefits will be manifested in the increased effectiveness of the technicians and the increased efficiencies of the management of the training business process. Where appropriate, capitalizing on technological advances and integrating systems and processes can provide the right amount of training at the right time, thus meeting the Chief of Naval Operations' (CNO) mandated "just-in-time" training approach.

Technology investments enable the development of several state-of-the-art training and administrative tools: Interactive Multimedia Instruction for the technicians in the Fleet in the form of Interactive Courseware with Computer Managed Instruction and Computer Aided Instruction for the schoolhouse.

Included in the AMTCS development effort is the Aviation Maintenance Training Continuum System - Software Module, which provides testing [Test and Evaluation], recording [Electronic Certification Qualification Records], and a Feedback system. The core functionality of these AMTCS tools are based and designed around the actual maintenance-related tasks the



technicians perform, and the tasks are stored and maintained in a Master Task List data bank. These tools are procured and fielded with appropriate Commercial-Off-The-Shelf hardware and software, i.e., Fleet Training Devices - Laptops, Personal Computers, Electronic Classrooms, Learning Resource Centers, operating software, and network software and hardware.

Upon receipt of direction from OPNAV (N789H), AMTCS concepts are to be implemented and the new tools integrated into the daily training environment of all participating aviation activities and supporting elements. AMTCS will serve as the standard training system for aviation maintenance training within the Navy, and is planned to supersede the existing MTIP program.

- **2. Personnel Qualification Standards.** A draft Personnel Qualification Standards was delivered to Strike Fighter Wing at NAS Lemoore in September 2002. When these are approved they will be included in updates to this document.
  - 3. Other Onboard or In-Service Training Packages. NA

#### J. LOGISTICS SUPPORT

#### 1. Manufacturer and Contract Numbers

CONTRACT NUMBER	MANUFACTURER	ADDRESS
N00019-96-D-0159	Raytheon Technical Systems Company	6125 East 21 <sup>st</sup> Street Indianapolis, IN 46219-2058
N00019-01-C-0105	Recon/Optical Incorporated	550 West Northwest Highway Barrington, IL 60010-3094

- **2. Program Documentation.** The following program documentation has been completed:
  - ° SHARP Operational Requirements Document, #522-88-99, 1 July 1999
  - ° Acquisition Logistics Support Plan, 19 December 2000
  - ° Raytheon Integrated Support Plan, 20 March 2001
- **3. Technical Data Plan.** Technical publications are to be developed for each assembly contained in SHARP and will provide data for the operation and maintenance of SHARP and associated Support Equipment. The Naval Air Technical Data and Engineering Service Command is the requiring activity for the SHARP program technical publication procurement and distribution.



NAVAIR North Island (Depot) has been assigned engineering cognizance of SHARP technical manuals. Under their direction, the Boeing Company will develop and deliver technical publications required for organizational level support of SHARP, while the Raytheon Company will develop and deliver technical publications required for intermediate level support of SHARP. When technical manual information becomes available it will be included in updates to this NTSP. Initial Operating Capability is scheduled for FY04.

- **4. Test Sets, Tools, and Test Equipment.** The SHARP Program is making maximum use of existing support equipment in the transport, loading, and maintenance of the SHARP system ashore and afloat. Technical Training Equipment (TTE) requirements are not yet determined. A tentative list of TTE follows; when TTE requirements information is updated it will be included in updates to this NTSP.
  - ° SHARP Peculiar Support Equipment Organization and Intermediate Level
    - SHOLS Trolley
    - LP Air Hose Assembly
    - SHOLS Link Adapter
    - Power Filter Assembly
    - Ram Air Inlet Cover
    - Electro-Optical Pod/Pallet Tester (EOPT)
    - EOPT Interface Cable
    - Transport Adapter-Forward
    - Transport Adapter-Aft
  - ° SHARP Peculiar Equipment Intermediate Level
    - MAS I/R Adapter
    - PAO Chiller
    - Sensor Lifting Beam
    - Shipboard Maintenance Frame Adapter
    - Shore Based Maintenance Stand
    - ECU Stand
    - ECU Lifting Beam
    - Hose Assembly PAO Hand Pump
    - ECU I/R Adapter
    - Universal Sensor I/R Adapter
    - HAS I/R Adapter
    - Scissors Lift
  - ° Common Support Equipment and F/A-18 Peculiar Support Equipment
    - Manual Bomb Hoist (HLU-288/E)
    - Transporter (MHU-191/M)
    - Transporter (MHU-202/M)



- SHOLS Rack Adapter Left
- SHOLS Rack Adapter Right
- PAO Hand Pump
- **5. Repair Parts.** The Navy Inventory Control Point began procurement of interim replacement parts in FY02 in support of the Low Rate Initial Production procurements. During the Interim Support period, all SHARP WRAs will be under an organizational level to OEM maintenance concept.
- **6. Human Systems Integration.** All new design systems and software address the human-machine interface for operators, maintainers, and support personnel. The design processes conformed to best standard human engineering practices as defined in existing human factors engineering design standards. The Human Systems Integration (HSI) Plan will establish the basis for effective integration of human factors engineering, manpower, personnel, training, health hazards, and safety considerations into the SHARP acquisition as outlined in Department of Defense Instruction 5000.2R and as per SHARP Operational Requirements Document 522-88-99.

This system has no habitability impact. There are no manpower impacts outside of those explained above and covered in Parts II and III of this document.

All future CBT, CAI, and ICW training material will be Sharable Content Object Reference Model (SCORM) conformant and conform with the technical standards to run in the intended environment: classroom automated electronic classroom or Learning Resource Center, Navy e-learning, AMTCS, or desktop (NMCI ashore or IT21 afloat).

The ECP process, in accordance with NAVAIRINST 4130.1C, is utilized to initiate upgrades to operational and training systems and allows for inputs to the affect on the human and MPT. All new engineering change proposals for SHARPS take into consideration the human-machine interface for operators, maintainers, and support personnel.

Environmental and occupational Safety and Health requirements meet federal, state, and local standards, regulations, and directives and are enforced by respective agencies, as applicable. Details can be found in the F/A-18E/F Shared Reconnaissance Pod (SHARP) System Programmatic Environmental, Safety, and Occupational Health Evaluation and Strategy. System safety will be accomplished in accordance with the SHARP Imagery Sensor System Safety Program Plan. Analyses were required to identify and quantify hazards in hardware, software and human interfaces. The program involved system safety in the design process to assure safety in design, manufacture, handling, testing, usage, maintenance and integration. Hazards, including environmental and hazardous materials, were eliminated or controlled to an acceptable level of risk in accordance with the SHARP Imagery Sensor System Safety Program Plan.



#### K. SCHEDULES

- 1. Installation and Delivery Schedules. As of the date of this NTSP, the SHARP program has been funded to meet the Navy's minimum warfighting requirement of 16 pods. The total inventory objective is 50 pods (40 operational and 10 pipeline). Deliveries began in FY02 with VFA-41 at NAS Lemoore. A confirmed delivery schedule is not currently available. When a confirmed delivery schedule becomes available it will be included in updates to this NTSP.
- **2. Ready For Operational Use Schedule.** The following table illustrates the draft transition plan as F-14 squadrons are phased out and transitioned to F/A-18F squadrons. SHARP pods will be ready for operational use when assigned to operational units during Carrier Airwing work-ups prior to deployment.

#### READY FOR OPERATIONAL USE SCHEDULE

ACTIVITY	FY02	FY03	FY04	FY05	FY06	FY07
VFA-41	1					
VFA-102	1					
VFA-122 (West FRS)	1					
VFA-2		1				
VFA-154			1			
VFA-106 (East FRS)			1			
VFA-103				1		
VFA-32				1		
VFA-213					1	
VFA-211					1	
VFA-143						1
VFA-31						1

**3.** Time Required to Install at Operational Sites. Existing TARPS maintenance facilities and spaces are planned to be utilized for SHARP. An initial candidate space was identified within Hangar 4, "D Mod" at AIMD, NAS Lemoore and construction is complete. Modifications are complete on the USS Nimitz (CVN 68) for SHARP support. Consideration is



being given to installation at a yet to be determined East Coast NAS. Actual time required for modification and installation is undetermined at this time.

- **4. Foreign Military Sales and Other Source Delivery Schedule.** Australia may be considered for FMS. Multi-platform application is being considered. For further information regarding FMS or other platform applications contact the Developing Agency, NAVAIR, PMA265.
- **5.** Training Devices and Technical Training Equipment Delivery Schedule. Current planning is to modify one of the prototype pods for ordnance upload and download training at the NAMTRAU. The modified SHARP Pod is currently planned for delivery by October 2003. Additionally, an Intermediate Level Training Pod must be developed in order to supplement the intermediate level maintenance course currently in development. When this information is updated it will be included in updates to this NTSP.

# L. GOVERNMENT-FURNISHED EQUIPMENT AND CONTRACTOR-FURNISHED EQUIPMENT TRAINING REQUIREMENTS. NA

#### M. RELATED NTSPs AND OTHER APPLICABLE DOCUMENTS

DOCUMENT OR NTSP TITLE	DOCUMENT OR NTSP NUMBER	PDA CODE	STATUS
F-14A/B/D Navy Training System Plan	N88-NTSP-A-50-8511C/A	PMA241	Approved Feb 02
F/A-18 Weapon System Navy Training System Plan	N88-NTSP-A-50-7703I/D	PMA265	Draft Oct 02



#### **PART II - BILLET AND PERSONNEL REQUIREMENTS**

The following elements are not affected by the SHARP and, therefore, are not included in Part II of this NTSP:

#### II.A. Billet Requirements

- II.A.2.a. Operational and Fleet Support Activity Deactivation Schedule
- II.A.2.b. Billets to be Deleted in Operational and Fleet Support Activities
- II.A.2.c. Total Billets to be Deleted in Operational and Fleet Support Activities



#### **PART II - BILLET AND PERSONNEL REQUIREMENTS**

#### **II.A. BILLET REQUIREMENTS**

SOURCE OF SCHEDULE: NAVMAC / AIR 3.4.1 DATE: Aug 2003

#### II.A.1.a. OPERATIONAL AND FLEET SUPPORT ACTIVITY ACTIVATION SCHEDULE

ACTIVITY, UIC		PFYs	CFY03	FY04	FY05	FY06	FY07
OPERATIONAL ACTIVITIES - USN							
VFA-103	09718	0	0	0	1	0	0
VFA-106 FRS EAST	09679	0	0	1	0	0	0
VFA-143	09281	0	0	0	0	0	1
VFA-211	09086	0	0	0	0	1	0
VFA-213	09934	0	0	0	0	1	0
VFA-31	09560	0	0	0	0	0	1
VFA-32	09053	0	0	0	1	0	0
VFA-102	09717	1	0	0	0	0	0
VFA-122 FRS West	09355	1	0	0	0	0	0
VFA-154	09678	0	0	1	0	0	0
VFA-2	09113	0	1	0	0	0	0
VFA-41	09774	1	0	0	0	0	0
TOTAL:		3	1	2	2	2	2
FLEET SUPPORT ACTIVITIES - USN							
NAS Oceana AIMD	44327	0	0	1	0	0	0
NAS Oceana AIMD SEAOPDET	46963	0	0	0	1	0	0
VX-23	39783	1	0	0	0	0	0
CV-63	03363	1	0	0	0	0	0
NAS Lemoore AIMD	44321	0	1	0	0	0	0
NAS Lemoore AIMD SEAOPDET	46964	1	0	0	0	0	0
VX-31	39787	1	0	0	0	0	0
VX-9	55646	1	0	0	0	0	Ō
TOTAL:		5	1	1	1	0	0

CV-63 is not supported by SEAOPDET personnel for SHARP Intermediate Level maintenance. Ship's company I-level manning is reflected accordingly.



ACTIVITY, UIC, PHASING INCREMENT	BILLI OFF		DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
OPERATIONAL ACTIVITIES - USN					
<b>VFA-103</b> , <b>09718</b> , <b>FY05</b> Increment ACDU	2 1 2 2 8 8 11 11 0 0	0 0 0 0 0 0 0 0 1 1 1 1	CDR ENS LCDR LCDR LT LT LTJG LTJG AT3 PH2 PH3 PHAN	1301 6470 1311 1321 1311 1321 1311 1321 8841 8341 8841	
ACTIVITY TOTAL:	45	5		33.1	
VFA-106 FRS EAST, 09679, FY04 Increment ACDU	3 1 4 10 6 55 25 0 0 0	0 0 0 0 0 0 0 1 1 1 2	CDR ENS LCDR LCDR LCDR LT LT AT3 PH2 PH3 PHAN	1302 6470 1302 1312 1322 1312 1322 8841 8341 8841	
ACTIVITY TOTAL:	104	5			
VFA-143, 09281, FY07 Increment ACDU	2 1 2 2 8 8 11 11 0 0	0 0 0 0 0 0 0 0 1 1 1 1 2	CDR ENS LCDR LCDR LT LT LTJG LTJG AT3 PH2 PH3 PHAN	1301 6470 1311 1321 1311 1321 1311 1321 8841 8341 8841	



ACTIVITY, UIC, PHASING INCREMENT	BILL OFF	ETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
ACTIVITY TOTAL:	45	5			
VFA-211, 09086, FY06 Increment ACDU	2 1 2 2 8 8 11 11 0 0	0 0 0 0 0 0 0 1 1 1 2	CDR ENS LCDR LCDR LT LT LTJG LTJG AT3 PH2 PH3 PHAN	1301 6470 1311 1321 1311 1321 1311 1321 8841 8341 8841 8841	
ACTIVITY TOTAL:	45	5			
VFA-213, 09934, FY06 Increment ACDU	2 1 2 2 8 8 11 11 0 0	0 0 0 0 0 0 0 1 1 1 2	CDR ENS LCDR LCDR LT LT LTJG LTJG AT3 PH2 PH3 PHAN	1301 6470 1311 1321 1311 1321 1311 1321 8841 8341 8841	
ACTIVITY TOTAL:	45	5			
VFA-31, 09560, FY07 Increment ACDU	2 1 2 2 8 8 11 11 0 0	0 0 0 0 0 0 0 1 1 1 2	CDR ENS LCDR LCDR LT LT LTJG LTJG AT3 PH2 PH3 PHAN	1301 6470 1311 1321 1311 1321 1311 1321 8841 8341 8841	



ACTIVITY, UIC, PHASING INCREMENT	BILL OFF	ETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
ACTIVITY TOTAL:	45	5			
VFA-32, 09053, FY05 Increment ACDU	2 1 2 2 8 8 11 11 0 0	0 0 0 0 0 0 0 1 1 1 1 2	CDR ENS LCDR LCDR LT LT LTJG LTJG AT3 PH2 PH3 PHAN	1301 6470 1311 1321 1311 1321 1311 1321 8841 8341 8841 8841	
ACTIVITY TOTAL:	45	5			
VFA-102, 09717, FY03 Increment ACDU	2 1 2 2 8 8 11 11 0 0 0	0 0 0 0 0 0 0 0 1 1 1 2	CDR ENS LCDR LCDR LT LT LTJG LTJG AT3 PH2 PH3 PHAN	1301 6470 1311 1321 1311 1321 1311 1321 8841 8341 8841	
ACTIVITY TOTAL:	45	5			
VFA-122 FRS West, 09355, FY03 Increment ACDU VFA-122 FRS West, 09355, FY04 Increment	0	1	AT3	8841	
ACDU ACDU	3 1 4 10 6 55 25 0 0	0 0 0 0 0 0 0 1 1 1 2	CDR ENS LCDR LCDR LCDR LT LT PH2 PH3 PHAN	1302 6470 1302 1312 1322 1312 1322 8341 8841 8841	



ACTIVITY, UIC, PHASING INCREMENT	BILLE OFF	TS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
ACTIVITY TOTAL:	104	5			
VFA-154, 09678, FY04 Increment ACDU	2 1 2 2 8 8 11 11 0 0	0 0 0 0 0 0 0 1 1 1 2	CDR ENS LCDR LCDR LT LT LTJG LTJG AT3 PH2 PH3 PHAN	1301 6470 1311 1321 1311 1321 1311 1321 8841 8341 8841	
ACTIVITY TOTAL:	45	5			
VFA-2, 09113, FY03 Increment ACDU	2 1 2 2 8 8 11 11 0 0	0 0 0 0 0 0 0 1 1 1 2	CDR ENS LCDR LCDR LT LT LTJG LTJG AT3 PH2 PH3 PHAN	1301 6470 1311 1321 1311 1321 1311 1321 8841 8341 8841 8841	
ACTIVITY TOTAL:	45	5			
VFA-41, 09774, FY03 Increment ACDU	2 1 2 2 8 8 11 11 0 0	0 0 0 0 0 0 0 1 1 1	CDR ENS LCDR LCDR LT LT LTJG LTJG AT3 PH2 PH3 PHAN	1301 6470 1311 1321 1311 1321 1311 1321 8841 8341 8841	



ACTIVITY, UIC, PHASING INCREMENT		ETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
ACTIVITY, OIG, PHASING INCREMENT	OFF	LINL	KATINO	FIVIOS	SIVIOS
ACTIVITY TOTAL:	45	5			
FLEET SUPPORT ACTIVITIES - USN					
NAS Oceana AIMD, 44327, FY04 Increment ACDU	0	1 2	AT1 AT2	66XX 66XX	
ACTIVITY TOTAL:	0	3	7112	00/01	
NAS Oceana AIMD SEAOPDET, 46963, FY05 Increment ACDU	0	4 2	AT2 ATAN	66XX 0000	
NAS Oceana AIMD SEAOPDET, 46963, FY06 Increment ACDU	0	4 2	AT2 ATAN	66XX 0000	
NAS Oceana AIMD SEAOPDET, 46963, FY07 Increment ACDU	0	2 1	AT2 ATAN	66XX 0000	
ACTIVITY TOTAL:	0	15			
<b>VX-23</b> , <b>39783</b> , <b>FY03</b> Increment ACDU	0	1	AT3	8841	
VX-23, 39783, FY04 Increment ACDU	1 4 2 30 5 0 0	0 0 0 0 0 1 1 2	ENS LCDR LCDR LT LT PH2 PH3 PHAN	6470 1312 1322 1312 1322 8341 8841 8841	
ACTIVITY TOTAL:	42	5			
CV-63, 03363, FY03 Increment ACDU	0 0 0	1 4 1	AT1 AT2 ATAN	66XX 66XX 0000	
ACTIVITY TOTAL:	0	6			
NAS Lemoore AIMD, 44321, FY03 Increment					



ACTIVITY, UIC, PHASING INCREMENT	BILL OFF	ETS ENL	DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS
ACDU	0 0	1 2	AT1 AT2	66XX 66XX	
ACTIVITY TOTAL:	0	3			
NAS Lemoore AIMD SEAOPDET, 46964 ACDU	0	2 1	AT2 ATAN	66XX 0000	
NAS Lemoore AIMD SEAOPDET, 46964, FY03 Increment ACDU	0	2	AT2	66XX	
NAS Lemoore AIMD SEAOPDET, 46964, FY04 Increment	0	1	ATAN	0000	
ACDU	0 0	2 1	AT2 ATAN	66XX 0000	
NAS Lemoore AIMD SEAOPDET, 46964, FY07 Increment ACDU	0	2 1	AT2 ATAN	66XX 0000	
ACTIVITY TOTAL:	0	12			
<b>VX-31, 39787, FY03 Increment</b> ACDU	0	1	AT3	8841	
VX-31, 39787, FY04 Increment ACDU	1 4 2 30 5 0 0	0 0 0 0 0 1 1 2	ENS LCDR LCDR LT LT PH2 PH3 PHAN	6470 1312 1322 1312 1322 8341 8841 8841	
ACTIVITY TOTAL:	42	5			
VX-9, 55646, FY03 Increment ACDU	0	1	AT3	8841	
VX-9, 55646, FY04 Increment ACDU	1 4 2 30 5 0	0 0 0 0 0	ENS LCDR LCDR LT LT PH2	6470 1312 1322 1312 1322 8341	



# II.A.1.b. BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

	BILL	ETS	DESIG/	PNEC/	SNEC/
ACTIVITY, UIC, PHASING INCREMENT	OFF	ENL	RATING	PMOS	SMOS
ACDU	0	1	PH3	8841	
	0	2	PHAN	8841	
ACTIVITY TOTAL:	42	5			



II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

DESIG/ RATING	PNEC/SNEC PMOS/SMOS	PFYs OFF E		CFY0 OFF E		FY0 OFF		FY0 OFF		FY( OFF		FY OFF	
CDR CDR ENS LCDR LCDR LCDR LCDR LT LT LT LT LT LTJG AT3 PH2 PH3	ATIONAL ACTIVI 1301 1302 6470 1302 1311 1312 1321 1322 1311 1322 1311 1322 1311 1321 8841 8841	TIES - ACD 0 0 0 0 0 0 0 0 0 0 0	0 0 0	6 0 3 0 6 0 6 0 24 0 24 0 33 33	4 3 3	2 6 3 8 2 20 2 12 8 110 8 50 11	2 3 3 3	4 0 2 0 4 0 4 0 16 0 16 0 22 22	2 2 2 2	4 0 2 0 4 0 4 0 16 0 16 0 22 22	2 2 2	4 0 2 0 4 0 16 0 16 0 22 22	2 2 2 2
PHAN  USN FLEET ENS LCDR LT LT AT1 AT2 AT3 ATAN PH2 PH3 PHAN	8841 SUPPORT ACTI 6470 1312 1322 1312 1322 66XX 66XX 8841 0000 8341 8841 8841	VITIES - AC 0 0 0 0 0	0 CDU 0 2 0 1 0 0	0 0 0 0	2 8 3 2 0 0	3 12 6 90 15	1 4 0 1 3 3 6	0 0 0 0	0 4 0 2 0 0	0 0 0 0	0 4 0 2 0 0	0 0 0 0	0 4 0 2 0 0
SUMMARY			U		U		O		U		U		U
USN OPERA	ATIONAL ACTIVI	TIES - ACD 0	U 0	135	16	253	14	90	10	90	10	90	10
USN FLEET	SUPPORT ACTI	VITIES - AC 0	DU 3	0	15	126	18	0	6	0	6	0	6



# II.A.1.c. TOTAL BILLETS REQUIRED FOR OPERATIONAL AND FLEET SUPPORT ACTIVITIES

DESIG/ RATING	PNEC/SNEC PMOS/SMOS	PFY OFF E	s ENL	CFY OFF	(03 ENL	FY OFF	04 ENL	FY OFF	05 ENL	FY OFF	06 ENL		'07 ENL
GRAND TO	ΓALS:												
USN - ACDU	J	0	3	135	31	379	32	90	16	90	16	90	16



# II.A.3. TRAINING ACTIVITIES INSTRUCTOR AND SUPPORT BILLET REQUIREMENTS

DESIG RATING		C/SNEC S/SMOS	PFY OFF	s ENL	CF' OFF		FY OFF	04 ENL	FY OFF		FY OFF	06 ENL		07 ENL
TRAINING A	CTIVIT	Y, LOCAT	ION, UIC	: MTU	J 1038	NAMTRA	AU, Lem	oore, 66	6060					
INSTRUCTO	R BILL	ETS												
USN ATC AT1 AT1 AT2 PH1	8341 8341 8341 8341	9502 9502 9502 9502	0 0 0 0	1 0 2 1 0	0 0 0 0	1 2 2 1 2								
TOTAL:			0	4	0	8	0	8	0	8	0	8	0	8
TRAINING A	CTIVIT	Y, LOCAT	ION, UIC	: MTU	J 1039	NAMTRA	AU, Oce	ana, 660	045					
INSTRUCTO	R BILL	ETS												
USN ATC AT1 AT1 PH1	8341 8341 8341	9502 9502 9502 9502	0 0 0	3 0 10 0	0 0 0	3 2 10 2	0 0 0 0	3 2 10 2	0 0 0 0	3 2 10 2	0 0 0 0	3 2 10 2	0 0 0 0	3 2 10 2
SUPPORT B	ILLETS	;												
USN AT1 AT2	8341 8341		0	1	0	1	0	1 1	0	1	0	1	0	1
TOTAL:			0	15	0	19	0	19	0	19	0	19	0	19



# II.A.4. CHARGEABLE STUDENT BILLET REQUIREMENTS

ACTIVITY, LOCATION, UIC	USN/ USMC	PF\ OFF	-	CFY OFF		FY OFF		FY0: OFF	5 ENL	FY( OFF		FY( OFF	07 ENL
MTU 1039 NAMTF	RAU, Oceana, USN	66045 0.0	0.2	0.0	0.4	0.0	0.5	0.0	0.7	0.0	0.8	0.0	0.9
MTU 1038 NAMTE	RAU, Lemoore USN	e, 66060 13.0	0.5	19.8	1.7	22.2	1.0	30.3	1.2	31.2	1.5	27.7	1.2
VFA-122 FRS We	st, NAS Lemo	ore, 093 33.2	55 0.0	39.5	0.0	48.3	0.0	63.9	0.0	67.6	0.0	58.3	0.0
SUMMARY TOTA	LS:												
	USN	46.2	0.7	59.3	2.1	70.5	1.5	94.2	1.9	98.8	2.3	86.0	2.1
GRAND TOTALS	:												
		46.2	0.7	59.3	2.1	70.5	1.5	94.2	1.9	98.8	2.3	86.0	2.1



# II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY( +/-	CUM	FY0 +/-	4 CUM	FY0 +/-	5 CUM	FY0 +/-	6 CUM	FY0 +/-	7 CUM
a. OFFICE	ER - USN												
Operation CDR CDR ENS LCDR LCDR LCDR LCDR LT LT LT LT LT LT	al Billets A 1301 1302 6470 1302 1311 1312 1321 1322 1311 1322 1311 1322 1311 1321	CDU and	TAR 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6 0 3 0 6 0 6 0 24 0 24 0 33 33 33	6 0 3 0 6 0 6 0 24 0 24 0 33 33	2 6 3 8 2 20 2 12 8 110 8 50 11	8 6 6 8 8 20 8 12 32 110 32 50 44 44	4 0 2 0 4 0 4 0 16 0 16 0 22 22	12 6 8 8 12 20 12 12 48 110 48 50 66 66	4 0 2 0 4 0 4 0 16 0 16 0 22 22	16 6 10 8 16 20 16 12 64 110 64 50 88 88	4 0 2 0 4 0 4 0 16 0 16 0 22 22	20 6 12 8 20 20 20 12 80 110 80 50 110
ENS LCDR LCDR LT LT Chargeab	6470 1312 1322 1312 1322	ACDU an Billets AC	0 0 0 0 0 0 DU and TAR 47	0 0 0 0 0	0 0 0 0 0	3 12 6 90 15	3 12 6 90 15	0 0 0 0 0	3 12 6 90 15	0 0 0 0 0	3 12 6 90 15	0 0 0 0 0	3 12 6 90 15
Operation			0	135	135	253	388	90	478	90	568	90	658
Fleet Supp	port		0	0	0	126	126	0	126	0	126	0	126
Chargeab	le Student		47	13	60	11	71	24	95	4	99	-13	86
b. ENLIST	TED - USN	I											
Operation AT3 PH2 PH3 PHAN	al Billets A 8841 8341 8841 8841	CDU and	TAR 0 0 0 0 0 0	4 3 3 6	4 3 3 6	2 3 3 6	6 6 6 12	2 2 2 4	8 8 8 16	2 2 2 4	10 10 10 20	2 2 2 4	12 12 12 24

Fleet Support Billets ACDU and TAR



# II.A.5. ANNUAL INCREMENTAL AND CUMULATIVE BILLETS

DESIG/ RATING	PNEC/ PMOS	SNEC/ SMOS	BILLET BASE	CFY +/-	703 CUM	FY( +/-	04 CUM	FY( +/-	05 CUM	FY +/-	06 CUM	FY +/-	07 CUM
AT1 AT2 AT3	66XX 66XX 8841		0 2 0	2 8 3	2 10 3	1 4 0	3 14 3	0 4 0	3 18 3	0 4 0	3 22 3	0 4 0	3 26 3
ATAN PH2 PH3	0000 8341 8841		1 0 0	2 0 0	3 0 0	1 3 3	4 3 3	2 0 0	6 3 3	2 0 0	8 3 3	2 0 0	10 3 3
PHAN	8841		0	0	0	6	6	0	6	0	6	0	6
Staff Billet ATC AT1 AT1 AT1 AT2 PH1	8341 8341 8341 8341 8341	9502 9502 9502 9502	4 0 1 12 2 0	0 4 0 0 0 4	4 4 1 12 2 4	0 0 0 0 0	4 4 1 12 2 4	0 0 0 0 0	4 4 1 12 2 4	0 0 0 0 0	4 4 1 12 2 4	0 0 0 0 0	4 4 1 12 2 4
			DU and TAF 1		3	-1	2	0	2	1	3	0	3
TOTAL U	SN ENLIS	TED BILL	ETS:										
Operation	al		0	16	16	14	30	10	40	10	50	10	60
Fleet Supp	oort		3	15	18	18	36	6	42	6	48	6	54
Staff			19	8	27	0	27	0	27	0	27	0	27
Chargeab	le Student	t	1	2	3	-1	2	0	2	1	3	0	3
c. OFFICE	ER - USM	С		١	lot Applic	cable							

d. ENLISTED - USMC Not Applicable



### **II.B. ANNUAL TRAINING INPUT REQUIREMENTS**

CIN, COURSE TITLE: E-2A-061X, F/A-18E/F Fleet Replacement Pilot Category 1 Pipeline

COURSE LENGTH: 37.0 Weeks
ATTRITION FACTOR: Navy: 0%

NAVY TOUR LENGTH: 36 Months
BACKOUT FACTOR: 0.74

TRAINING ACTIVITY	SOURCE	ACDU/TAR SELRES	CFY03 OFF ENL	FY04 OFF ENL	FY05 OFF ENL	FY06 OFF ENL	FY07 OFF ENL
VFA-122 FF	RS West, NAS	Lemoore					
	USN	ACDU	18	24	31	30	26
		TOTAL:	18	24	31	30	26

CIN, COURSE TITLE: E-2A-062X, F/A-18E/F Fleet Replacement Pilot Category 2 Pipeline

COURSE LENGTH: 31.0 Weeks NAVY TOUR LENGTH: 36 Months ATTRITION FACTOR: Navy: 0% BACKOUT FACTOR: 0.62

TRAINING	ACDU/TAR	CFY03	FY04	FY05	FY06	FY07
ACTIVITY SOL	JRCE SELRES	OFF ENL				
VFA-122 FRS We	st, NAS Lemoore					
USN	I ACDU	18	21	28	29	25
	TOTAL:	18	21	28	29	25

CIN, COURSE TITLE: E-2A-063X, F/A-18E/F Fleet Replacement Pilot Category 3 Pipeline

COURSE LENGTH: 24.2 Weeks NAVY TOUR LENGTH: 36 Months ATTRITION FACTOR: Navy: 0% BACKOUT FACTOR: 0.48

TRAINING		ACDU/TAR	CFY03	FY04	FY05	FY06	FY07
ACTIVITY	SOURCE	SELRES	OFF ENL				
VFA-122 FR	RS West, NAS	Lemoore					
	USN	ACDU	10	11	15	16	14
		TOTAL:	10	11	15	16	14

CIN, COURSE TITLE: E-2A-064X, F/A-18E/F Fleet Replacement Pilot Category 4 Pipeline

COURSE LENGTH: 5.2 Weeks NAVY TOUR LENGTH: 36 Months
ATTRITION FACTOR: Navy: 0% BACKOUT FACTOR: 0.10

<b>TRAINING</b>		ACDU/TAR	CFY03	FY04	FY05	FY06	FY07
<b>ACTIVITY</b>	SOURCE	SELRES	OFF ENL				
VFA-122 FR	S West, NAS L	emoore					
	USN	ACDU	9	7	11	13	12
		TOTAL:	9	7	11	13	12

CIN, COURSE TITLE: E-2D-181X, F/A-18F Combat Capable Weapons Sensor Officer Category 1 Pipeline

COURSE LENGTH: 33.0 Weeks
ATTRITION FACTOR: Navy: 0%

NAVY TOUR LENGTH: 36 Months
BACKOUT FACTOR: 0.66

TRAINING ACTIVITY	SOURCE	ACDU/TAR SELRES	CFY03 OFF ENL	FY04 OFF ENL	FY05 OFF ENL	FY06 OFF ENL	FY07 OFF ENL
VFA-122 FR	S West, NAS L	_emoore					
	USN	ACDU	17	21	28	33	28
		TOTAL:	17	21	28	33	28



#### **II.B. ANNUAL TRAINING INPUT REQUIREMENTS**

CIN, COURSE TITLE: E-2D-182X, F/A-18F Combat Capable Weapons Sensor Officer Category 2 Pipeline

COURSE LENGTH: 31.0 Weeks NAVY TOUR LENGTH: 36 Months ATTRITION FACTOR: Navy: 0% BACKOUT FACTOR: 0.62

TRAINING ACTIVITY	SOURCE	ACDU/TAR SELRES	CFY03 OFF ENL	FY04 OFF ENL	FY05 OFF ENL	FY06 OFF ENL	FY07 OFF ENL
MTU 1038 N	IAMTRAU, Ler	moore					
	USN	ACDU	16	20	26	26	23
		TOTAL:	16	20	26	26	23

CIN, COURSE TITLE: E-2D-183X, F/A-18F Combat Capable Weapons Sensor Officer Category 3 Pipeline

COURSE LENGTH: 24.2 Weeks
ATTRITION FACTOR: Navy: 0%

NAVY TOUR LENGTH: 36 Months
BACKOUT FACTOR: 0.48

TRAINING		ACDU/TAR	CFY03	FY04	FY05	FY06	FY07	
<b>ACTIVITY</b>	SOURCE	SELRES	OFF ENL					
MTU 1038 N	NAMTRAU, Lei	moore						
	USN	ACDU	18	19	27	28	25	
		TOTAL:	18	19	27	28	25	

CIN, COURSE TITLE: E-2D-184X, F/A-18F Combat Capable Weapons Sensor Officer Category 4 Pipeline

COURSE LENGTH: 5.2 Weeks
ATTRITION FACTOR: Navy: 0%

NAVY TOUR LENGTH: 36 Months
BACKOUT FACTOR: 0.10

TRAINING		ACDU/TAR CFY03		FY04	FY05	FY06	FY07	
ACTIVITY	SOURCE	SELRES	OFF ENL					
MTU 1038 N	NAMTRAU, Lei	moore						
	USN	ACDU	21	16	25	29	26	
		TOTAL:	21	16	25	29	26	

CIN, COURSE TITLE: E-102-0623, F/A-18E/F Avionics Systems (Initial) Organizational Maintenance Pipeline

COURSE LENGTH: 13.8 Weeks NAVY TOUR LENGTH: 36 Months ATTRITION FACTOR: Navy: 10% BACKOUT FACTOR: 0.28

TRAINING		ACDU/TAR	CFY03		FY04		FY05		FY06		FY07	
<b>ACTIVITY</b>	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU 1038 N	IAMTRAU, Len	noore										
	USN	ACDU		7		4		5		6		5
		TOTAL:		7		4		5		6		5

CIN, COURSE TITLE: C-XXX-XXXX, SHARP Intermediate Maintenance Technician Pipeline

COURSE LENGTH: 4.4 Weeks
ATTRITION FACTOR: Navy: 10%

NAVY TOUR LENGTH: 36 Months
BACKOUT FACTOR: 0.09

TRAINING		ACDU/TAR CFY0		CFY03 FY04		FY05		FY06		FY07		
<b>ACTIVITY</b>	SOURCE	SELRES	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL
MTU 1039 N	IAMTRAU, Oce	eana										
	USN	ACDU		5		7		9		10		12
		TOTAL:		5		7		9		10		12



### **PART III - TRAINING REQUIREMENTS**

The following elements are not affected by the SHARP Program and, therefore, are not included in Part III of this NTSP:

III.A.2. Follow-on Training

III.A.2.c. Unique Courses

III.A.3. Existing Training Phased Out

- **Note 1:** The training shown in this document is only the training required to support SHARP. For information regarding other F/A-18 training, refer to the F/A-18 Weapon System Navy Training System Plan N88-NTSP-A-50-7701I/D dated October 2002
- **Note 2:** The training for the F/A-18E/F Avionics courses shown below in element III.A.2.a includes the 16-hour course length increase caused by SHARP



#### **PART III - TRAINING REQUIREMENTS**

#### **III.A. TRAINING COURSE REQUIREMENTS**

#### **III.A.1. INITIAL TRAINING REQUIREMENTS**

**COURSE TITLE:** F/A-18F SHARP Aircrew Familiarization

COURSE DEVELOPER: Contractor

COURSE INSTRUCTOR: Contractor Facilitator

COURSE LENGTH: 5 Days

**ACTIVITY DESTINATIONS: VFA-122 FRS** 

LOCATION, UIC BEGIN STUDENTS
DATE OFF ENL CIV

NAS Lemoore, 09355 Jan 03 42 Input 0.6 AOB

0 Chargeable

COURSE TITLE: F/A-18 SHARP Organizational Maintenance

COURSE DEVELOPER: Contractor
COURSE INSTRUCTOR: Contractor
COURSE LENGTH: 5 Days

ACTIVITY DESTINATIONS: MTU 1038 NAMTRAU Lemoore, Fleet Squadrons

BEGIN STUDENTS
LOCATION. UIC DATE OFF ENL

MTU 1038 NAMTRAU Lemoore, 66060 Jan 03 8 Input

0.1 AOB Chargeable

CIV

COURSE TITLE: SHARP Intermediate Maintenance

COURSE DEVELOPER: Contractor

COURSE INSTRUCTOR: Contractor Facilitator

COURSE LENGTH: 5 Days

ACTIVITY DESTINATIONS: MTU 1038 NAMTRAU Lemoore, AIMD Lemoore, SEAOPDET

BEGIN STUDENTS

LOCATION, UIC DATE OFF ENL CIV

MTU 1038 NAMTRAU Lemoore, 09355 Jan 03 6 Input

0.1 AOB

Chargeable



### **III.A.2. FOLLOW-ON TRAINING**

### III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: E-2A-061X, F/A-18E/F Fleet Replacement Pilot Category 1 Pipeline

**TRAINING ACTIVITY:** VFA-122 FRS West **LOCATION, UIC:** NAS Lemoore, 09355

SOURCE: USN STUDENT CATEGORY: ACDU - TAR

CFY03	FY04	FY05	FY06	FY07	
OFF ENL					
18	24	31	30	26	ATIR
18	24	31	30	26	Output
12.7	16.9	21.8	21.1	18.3	AOB
12.7	16.9	21.8	21.1	18.3	Chargeable

CIN, COURSE TITLE: E-2A-062X, F/A-18E/F Fleet Replacement Pilot Category 2 Pipeline

**TRAINING ACTIVITY:** VFA-122 FRS West **LOCATION, UIC:** NAS Lemoore, 09355

**SOURCE**: USN **STUDENT CATEGORY**: ACDU - TAR

CFY03		FY04		FY05		FY06		FY07		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
18		21		28		29		25		ATIR
18		21		28		29		25		Output
10.6		12.4		16.5		17.1		14.7		AOB
10.6		12.4		16.5		17.1		14.7		Chargeable

CIN, COURSE TITLE: E-2A-063X, F/A-18E/F Fleet Replacement Pilot Category 3 Pipeline

**TRAINING ACTIVITY:** VFA-122 FRS West **LOCATION, UIC:** NAS Lemoore, 09355

CF'	Y03	F	Y04	FY05 FY06		Y06	FY07			
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
10		11		15		16		14		ATIR
10		11		15		16		14		Output
4.6		5.1		6.9		7.4		6.5		AOB
4.6		5.1		6.9		7.4		6.5		Chargeable



#### III.A.2.a. EXISTING COURSES

CIN, COURSE TITLE: E-2A-064X, F/A-18E/F Fleet Replacement Pilot Category 4 Pipeline

**TRAINING ACTIVITY:** VFA-122 FRS West LOCATION, UIC: NAS Lemoore, 09355

SOURCE: USN STUDENT CATEGORY: ACDU - TAR

CFY03	FY04	FY05	FY06	FY07	
OFF ENL					
9	7	11	13	12	ATIR
9	7	11	13	12	Output
0.9	0.7	1.1	1.3	1.2	AOB
0.9	0.7	1.1	1.3	1.2	Chargeable

CIN, COURSE TITLE: E-2D-181X, F/A-18F Combat Capable Weapons Sensor Officer Category 1 Pipeline

**TRAINING ACTIVITY:** VFA-122 FRS West **LOCATION, UIC:** NAS Lemoore, 09355

SOURCE: USN STUDENT CATEGORY: ACDU - TAR

CFY03	FY04	FY05	FY06	FY07	
OFF ENL					
17	21	28	33	28	ATIR
17	21	28	33	28	Output
10.7	13.2	17.6	20.7	17.6	AOB
10.7	13.2	17.6	20.7	17.6	Chargeable

CIN, COURSE TITLE: E-2D-182X, F/A-18F Combat Capable Weapons Sensor Officer Category 2 Pipeline

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU **LOCATION, UIC:** Lemoore, 66060

CFY03		FY04		FY05		FY06		FY07			
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL		
16		20		26		26		23		ATIR	
16		20		26		26		23		Output	
9.4		11.8		15.3		15.3		13.5		AOB	
9.4		11.8		15.3		15.3		13.5		Chargeable	



### **III.A.2.a. EXISTING COURSES**

CIN, COURSE TITLE: E-2D-183X, F/A-18F Combat Capable Weapons Sensor Officer Category 3 Pipeline

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU **LOCATION, UIC:** Lemoore, 66060

SOURCE: USN STUDENT CATEGORY: ACDU - TAR

CFY	FY03 I		Y03 FY04		<b>/04</b>	FY05		FY06		FY07		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL			
18		19		27		28		25		ATIR		
18		19		27		28		25		Output		
8.3		8.8		12.5		13.0		11.6		AOB		
8.3		8.8		12.5		13.0		11.6		Chargeable		

CIN, COURSE TITLE: E-2D-184X, F/A-18F Combat Capable Weapons Sensor Officer Category 4 Pipeline

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU **LOCATION, UIC:** Lemoore, 66060

SOURCE: USN STUDENT CATEGORY: ACDU - TAR

CFY03	FY04	FY05	FY06	FY07	
OFF ENL					
21	16	25	29	26	ATIR
21	16	25	29	26	Output
2.1	1.6	2.5	2.9	2.6	AOB
2.1	1.6	2.5	2.9	2.6	Chargeable

CIN, COURSE TITLE: E-102-0623, F/A-18E/F Avionics Systems (Initial) Organizational Maintenance Pipeline

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU **LOCATION, UIC:** Lemoore, 66060

CF	Y03	F'	Y04	F'	Y05	F`	Y06	FY07		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	7		4		5		6		5	ATIR
	6		4		5		5		5	Output
	1.7		1.0		1.2		1.5		1.2	AOB
	1.7		1.0		1.2		1.5		1.2	Chargeable



# III.A.2.b. PLANNED COURSES

CIN, COURSE TITLE: C-XXX-XXXX, SHARP Intermediate Maintenance Technician Pipeline

TRAINING ACTIVITY: MTU 1039 NAMTRAU LOCATION, UIC: Oceana, 66045

CFY03		FY04		FY05		FY06		FY07		
OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	OFF	ENL	
	5		7		9		10		12	ATIR
	5		6		8		9		11	Output
	0.4		0.5		0.7		0.8		0.9	AOB
	0.4		0.5		0.7		0.8		0.9	Chargeable



# **PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS**

The following elements are not affected by the SHARP Program and, therefore, are not included in Part IV of this NTSP:

#### IV.C. Facility Requirements

- IV.C.1. Facility Requirements Summary (Space/Support) by Activity
- IV.C.2. Facility Requirements Detailed by Activity and Course
- IV.C.3. Facility Project Summary by Program
- **Note 1:** The Technical Training Equipment (TTE) listed in element IV.A.1 is a tentative list of the TTE that will be required to support SHARP Training at the organizational level. When this list is updated and part numbers are identified, it will be included in updates to this NTSP.
- **Note 2:** The SHARP Pod Upload and Download Training device listed in element IV.A.2 will be a modified "dummy" Pod. A functional pod will be available to augment training at the intermediate level. A description of this device is not currently available. When this information becomes available it will be included in updates to this NTSP.
- **Note 3:** Information regarding the Curricula Materials and Training Aids required to support SHARP training is not currently available. When this information becomes available it will be included in updates to this NTSP.
- **Note 4:** Information regarding the Technical Manuals required to support SHARP training is not currently available. When this information becomes available it will be included in updates to this NTSP.



### **PART IV - TRAINING LOGISTICS SUPPORT REQUIREMENTS**

### IV.A. TRAINING HARDWARE

### IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

**CIN, COURSE TITLE:** C-102-9977, F/A-18E/F Avionics Systems (Initial) Organizational Maintenance (Track E-102-0623) **TRAINING ACTIVITY:** MTU 1038 NAMTRAU

LOCATION, UIC: Lemoore, 66060

ITEM No.	EQUIPMENT / TYPE OR RANGE OF REPAIR	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE					
0001	SHOLS Trolley	1	Oct 04	GFE	Pending
0002	LP Air Hose Assembly	1	Oct 04	GFE	Pending
0003	SHOLS Link adapter	1	Oct 04	GFE	Pending
0004	Power Filter Adapter	1	Oct 04	GFE	Pending
0005	Ram Air inlet cover	1	Oct 04	GFE	Pending
8000	Transport Adapter-forward	1	Oct 04	GFE	Pending
0009	Transport adapter-aft	1	Oct 04	GFE	Pending
0010	MAS I/R Adapter	1	Oct 04	GFE	Pending
0011	PAO Chiller	1	Oct 04	GFE	Pending
0012	Sensor Lifting Beam	1	Oct 04	GFE	Pending
0013	Shipboard Maintenance Frame Adapter	1	Oct 04	GFE	Pending
0014	Shore Based Maintenance Stand	1	Oct 04	GFE	Pending
0015	ECU Stand	1	Oct 04	GFE	Pending
0016	ECU Lifting Beam	1	Oct 04	GFE	Pending
0017	Hose Assembly-PAO Hand Pump	1	Oct 04	GFE	Pending
0018	ECU I/R Adapter	1	Oct 04	GFE	Pending
0019	Universal sensor I/R Adapter	1	Oct 04	GFE	Pending
0020	HAS I/R Adapter	1	Oct 04	GFE	Pending
0021	Scissors Lift	1	Oct 04	GFE	Pending



# IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

0022	Manual bomb hoist (HLU-288/E)	1	Oct 04	GFE	Pending
0023	Transporter (MHU-191/M)	1	Oct 04	GFE	Pending
0024	Transporter (MHU-202/M)	1	Oct 04	GFE	Pending
0025	SHOLS Rack Adapter-Left	1	Oct 04	GFE	Pending
0026	SHOLS Rack Adapter-Right	1	Oct 04	GFE	Pending
0027	PAO Hand Pump	1	Oct 04	GFE	Pending
SPTE					
0028	Electro-Optical POD/Pallet Tester (EOPT)	1	Oct 04	GFE	Pending
0029	EOPT Interface Cable	1	Oct 04	GFE	Pending

CIN, COURSE TITLE: C-102-9978, F/A-18E/F Avionics Systems (Career) Organizational Maintenance (Track E-102-0624)

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU **LOCATION, UIC:** Lemoore, 66060

ITEM No.	EQUIPMENT / TYPE OR RANGE OF REPAIR	QTY REQD	DATE REQD	GFE CFE	STATUS
TTE		4	0-4.04	OFF	Dan din n
0001	SHOLS Trolley	1	Oct 04	GFE	Pending
0002	LP Air Hose Assembly	1	Oct 04	GFE	Pending
0003	SHOLS Link adapter	1	Oct 04	GFE	Pending
0004	Power Filter Adapter	1	Oct 04	GFE	Pending
0005	Ram Air inlet cover	1	Oct 04	GFE	Pending
8000	Transport Adapter-forward	1	Oct 04	GFE	Pending
0009	Transport adapter-aft	1	Oct 04	GFE	Pending
0010	MAS I/R Adapter	1	Oct 04	GFE	Pending
0011	PAO Chiller	1	Oct 04	GFE	Pending
0012	Sensor Lifting Beam	1	Oct 04	GFE	Pending
0013	Shipboard Maintenance Frame Adapter	1	Oct 04	GFE	Pending
0014	Shore Based Maintenance Stand	1	Oct 04	GFE	Pending



# IV.A.1. TTE / GPTE / SPTE / ST / GPETE / SPETE

0015	ECU Stand	1	Oct 04	GFE	Pending
0016	ECU Lifting Beam	1	Oct 04	GFE	Pending
0017	Hose Assembly-PAO Hand Pump	1	Oct 04	GFE	Pending
0018	ECU I/R Adapter	1	Oct 04	GFE	Pending
0019	Universal sensor I/R Adapter	1	Oct 04	GFE	Pending
0020	HAS I/R Adapter	1	Oct 04	GFE	Pending
0021	Scissors Lift	1	Oct 04	GFE	Pending
0022	Manual bomb hoist (HLU-288/E)	1	Oct 04	GFE	Pending
0023	Transporter (MHU-191/M)	1	Oct 04	GFE	Pending
0024	Transporter (MHU-202/M)	1	Oct 04	GFE	Pending
0025	SHOLS Rack Adapter-Left	1	Oct 04	GFE	Pending
0026	SHOLS Rack Adapter-Right	1	Oct 04	GFE	Pending
0027	PAO Hand Pump	1	Oct 04	GFE	Pending
SPTE					
0028	Electro-Optical POD/Pallet Tester (EOPT)	1	Oct 04	GFE	Pending
0029	EOPT Interface Cable	1	Oct 04	GFE	Pending



**DEVICE:** 15C13, F/A-18 Part Task Trainer

**DESCRIPTION:** Device 15C13 consists of an actual F/A18 cockpit which provides simulation of the static and

dynamic indications of the aircraft and is capable of being operated in either a ground or flight

mode

**MANUFACTURER:** Gould Simulation System Division (now Contraves)

**CONTRACT NUMBER: NA TEE STATUS:** NA

TRAINING ACTIVITY: VFA-122 FRS West LOCATION, UIC: NAS Lemoore, 09355

QTY	DATE	RFT		COURSES
REQD	REQD	DATE	STATUS	SUPPORTED
1	May 82	May 82	Onboard	C-2A-06X1 (

May 82 May 82 Onboard C-2A-06X1 (Track E-2A-061X)

C-2A-06X2 (Track E-2A-062X) C-2A-06X3 (Track E-2A-063X) C-2A-06X4 (Track E-2A-064X)



**DEVICE:** 2E7, F/A-18 Weapons Tactics Trainer

**DESCRIPTION:** Device 2E7 is a dual training complex, consisting of two identical training areas and numerous

supporting stations and consoles. Each training area consists of an actual F/A-18 cockpit

mounted

near the center of a large sphere. Simulated images of the sky, earth, targets, and gunfire are

projected on the inner surface of the sphere and are viewed by the trainee during the training exercise. The advanced design of the computer image generator permits detail and realism

in

these visual presentations. Device 2E7 is housed in five rooms and/or areas at a facility. Room 1

is the trainee room, containing the two spheres. Room 2 contains two instructor stations, from

where the instructor(s) monitor and control the exercises. Room 3 contains the debrief station

where the recorded exercise may be played back for discussion with the trainee. Room 4 contains the computer image generator, which generates video for the presentations, and an equipment monitor console and the interface electronics. Room 5 contains the digital

**MANUFACTURER: Hughes Aircraft Company** 

**CONTRACT NUMBER: NA TEE STATUS:** NA

TRAINING ACTIVITY: VFA-122 FRS West LOCATION, UIC: NAS Lemoore, 09355

QTY REQD	DATE REQD	RFT DATE	STATUS	COURSES SUPPORTE	D
1	Jan 00	Jan 00	Onboard	C-2A-06X1	(Track E-2A-061X)
				C-2A-06X2	(Track E-2A-062X)
				C-2A-06X3	(Track E-2A-063X)
				C-2A-06X4	(Track E-2A-064X)
				C-2D-18X1	(Track E-2D-181X)
				C-2D-18X2	(Track E-2D-182X)
				C-2D-18X3	(Track E-2D-183X)
				C-2D-18X4	(Track E-2D-184X)



**DEVICE:** 2F132, F/A-18E/F Operational Flight Trainer

**DESCRIPTION:** Device 2F132 is designed for training of crew members and closely simulates the many

functions of

the aircraft. A mockup of the aircraft's cockpit uses the same controls, instruments, and

displays as

found in the production aircraft, mission computers and a communication systems control set,

identical to those in the actual aircraft, interface data between Training Device computers and

the

cockpit. The device is used primarily for Pilot Proficiency Tactics, NATOPS and Instrument

Flight

Checks. Secondary uses are engine turn qualifications, NATOPS training, and flight line fire

MANUFACTURER: Honeywell (now Hughes Aircraft Company)

**CONTRACT NUMBER:** N0019-92-C-0060

TEE STATUS: NA

**TRAINING ACTIVITY:** VFA-122 FRS West **LOCATION, UIC:** NAS Lemoore, 09355

QTY	DATE	RFT		COURSES	
REQD	REQD	DATE	STATUS	SUPPORTE	D
2	Sep 02	Sep 02	Onboard	C-2A-06X1	(Track E-2A-061X)
				C-2A-06X2	(Track E-2A-062X)
				C-2A-06X3	(Track E-2A-063X)
				C-2A-06X4	(Track E-2A-064X)
				C-2D-18X1	(Track E-2D-181X)
				C-2D-18X2	(Track E-2D-182X)
				C-2D-18X3	(Track E-2D-183X)
				C-2D-18X4	(Track E-2D-184X)



**DEVICE:** 11H103B, Avionics System Maintenance Trainer

**DESCRIPTION:** The Avionics System Maintenance Trainer (11H103B) simulates the F/A-18 avionics system

and

is used to demonstrate and familiarize personnel with system components, operating

characteristics,

maintenance, and troubleshooting procedures. This trainer allows students to practice or

interact

with normal operation and/or abnormal operations, system checkout, fault isolation, and

component

identification and location.

**MANUFACTURER:** Educational Computer Corporation (Pt # 921335002)

**CONTRACT NUMBER:** N00019-86-C-0207

TEE STATUS: NA

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU **LOCATION, UIC:** Lemoore, 66060

QTY DATE RFT COURSES
REQD REQD DATE STATUS SUPPORTED

1 Aug 82 Aug 82 Onboard C-102-9977 (Track E-102-0623)

C-102-9978 (Track E-102-0624)

**DEVICE:** CBT Learning Resource Center

**DESCRIPTION:** The Learning Resource Center (LRC) functions as a central repository for all training materials

delivered on digital media to a schoolhouse. The LRC provides instructional materials such

as

CAI, ICW, trainee guides, and simulation software for user self-paced, refresher study to supplement formal classroom training. The LRC provides a workbench and development

tools for

instructors to review, update, and maintain instructional materials. The LRC also functions as

an

Electronic Classroom for backup or overflow classroom training. The primary components of

the

LRC subsystem are the Developer Station, user workstations, presentation device, video controller, network, network server, CBT materials, and the Aviation Maintenance Training

Continuum System Software Module application program.

**MANUFACTURER:** Boeing Aircraft (Pt # 94108X-XXXX-XX)

**CONTRACT NUMBER:** N00600-96-D-0193

TEE STATUS: NA

TRAINING ACTIVITY: MTU 1038 NAMTRAU LOCATION, UIC: Lemoore, 66060

QTY DATE RFT COURSES REQD REQD DATE STATUS SUPPORTED

Jan 02 Jan 02 Onboard C-102-9977 (Track E-102-0623)

C-102-9978 (Track E-102-0624)



**DEVICE:** Computer Based Training Electronic Classroom

**DESCRIPTION:** The Electronic Classroom provides an effective learning arrangement, which satisfies fire and

safety regulations. Attention is paid to the computer screen viewing depth, computer screen

MANUFACTURER: Boeing Aircraft (Pt # 94008X-XXXX-XX)

**CONTRACT NUMBER:** N00600-96-D-0193

TEE STATUS: NA

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU **LOCATION, UIC:** Lemoore, 66060

QTY DATE RFT COURSES REQD REQD DATE STATUS SUPPORTED

3 Jan 03 Jan 03 Onboard C-102-9977 (Track E-102-0623)

C-102-9978 (Track E-102-0624) C-102-9979 (Track E-102-0625)

**DEVICE:** F/A-18E/F Armament System Maintenance Trainer

**DESCRIPTION:** The F/A-18E/F Armament System Maintenance Trainer provides organizational level

maintenance

training for the armament system and fault isolation to interfacing systems. It is used to

demonstrate

and familiarize personnel with system components, operating characteristics, maintenance,

and

troubleshooting. The trainer allows the student to practice normal operation, system

checkout, fault

isolation, removal and reinstallation of selected components, and functional test of the

armament

system, and component identification and location.

**MANUFACTURER:** Boeing Aircraft (Pt # 921335001)

CONTRACT NUMBER: NA TEE STATUS: NA

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU **LOCATION, UIC:** Lemoore, 66060

QTY DATE RFT COURSES REQD REQD DATE STATUS SUPPORTED

Jul 00 Jul 00 Onboard C-102-9977 (Track E-102-0623)

C-102-9978 (Track E-102-0624) C-102-9979 (Track E-102-0625)



# IV.B. COURSEWARE REQUIREMENTS

# IV.B.1. TRAINING SERVICES

COURSE / TYPE OF TRAINING	SCHOOL LOCATION, UIC	NO. OF PERSONNEL	MAN WEEKS REQUIRED	DATE BEGIN
F/A-18 SHARP Organizational Maintenance	NAS Lemoore, 09355	2	2	Jan 03
F/A-18F SHARP Aircrew Familiarization	NAS Lemoore, 09355	42	42	Jan 03
SHARP Intermediate Maintenance	NAS Lemoore, 09355	3	6	Jan 03

DATE



#### IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: E-2A-061X, F/A-18E/F Fleet Replacement Pilot Category 1 Pipeline

TRAINING ACTIVITY: VFA-122 FRS West LOCATION, UIC: NAS Lemoore, 09355

QTY DATE TYPES OF MATERIAL OR AID REQD **STATUS** REQD Instructor Guides for F/A-18E/F Aircraft Jul 00 Onboard

CIN, COURSE TITLE: E-2A-062X, F/A-18E/F Fleet Replacement Pilot Category 2 Pipeline

TRAINING ACTIVITY: VFA-122 FRS West LOCATION, UIC: NAS Lemoore, 09355

QTY DATE TYPES OF MATERIAL OR AID **REQD** REQD **STATUS** Instructor Guides for F/A-18E/F Aircraft Jul 00 Onboard

CIN, COURSE TITLE: E-2A-063X, F/A-18E/F Fleet Replacement Pilot Category 3 Pipeline

TRAINING ACTIVITY: VFA-122 FRS West LOCATION, UIC: NAS Lemoore, 09355

QTY TYPES OF MATERIAL OR AID **REQD STATUS REQD** Instructor Guides for F/A-18E/F Aircraft 3 Jul 00 Onboard

CIN, COURSE TITLE: E-2A-064X, F/A-18E/F Fleet Replacement Pilot Category 4 Pipeline

TRAINING ACTIVITY: VFA-122 FRS West LOCATION, UIC: NAS Lemoore, 09355

QTY DATE TYPES OF MATERIAL OR AID REQD REQD **STATUS** Instructor Guides for F/A-18E/F Aircraft 3 Jul 00 Onboard

CIN, COURSE TITLE: E-2D-181X, F/A-18F Combat Capable Weapons Sensor Officer Category 1 Pipeline

TRAINING ACTIVITY: VFA-122 FRS West NAS Lemoore, 09355 LOCATION, UIC:

QTY DATE TYPES OF MATERIAL OR AID **REQD REQD STATUS** Instructor Guides for F/A-18E/F Aircraft Jul 00 Onboard

CIN, COURSE TITLE: E-2D-182X, F/A-18F Combat Capable Weapons Sensor Officer Category 2 Pipeline

TRAINING ACTIVITY: MTU 1038 NAMTRAU

LOCATION, UIC: Lemoore, 66060

QTY DATE TYPES OF MATERIAL OR AID **STATUS** REQD REQD Instructor Guides for F/A-18E/F Aircraft Jul 00 Onboard

CIN, COURSE TITLE: E-2D-183X, F/A-18F Combat Capable Weapons Sensor Officer Category 3 Pipeline

TRAINING ACTIVITY: MTU 1038 NAMTRAU

LOCATION, UIC: Lemoore, 66060

QTY DATE TYPES OF MATERIAL OR AID **REQD** REQD **STATUS** Instructor Guides for F/A-18E/F Aircraft Onboard 3 Jul 00



### IV.B.2. CURRICULA MATERIALS AND TRAINING AIDS

CIN, COURSE TITLE: E-2D-184X, F/A-18F Combat Capable Weapons Sensor Officer Category 4 Pipeline

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU **LOCATION, UIC:** Lemoore, 66060

TYPES OF MATERIAL OR AID
Instructor Guides for F/A-18E/F Aircraft

QTY DATE
REQD REQD STATUS
3 Jul 00 Onboard

CIN, COURSE TITLE: C-102-9977, F/A-18E/F Avionics Systems (Initial) Organizational Maintenance (Track E-102-0623)

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU **LOCATION, UIC:** Lemoore, 66060

TYPES OF MATERIAL OR AID
Instructor Guides for F/A-18E/F Aircraft
Interactive Electronic Technical Manual System

QTY
REQD
REQD
STATUS
3 Jul 00 Onboard
1 Jul 00 Onboard

CIN, COURSE TITLE: C-102-9978, F/A-18E/F Avionics Systems (Career) Organizational Maintenance (Track E-102-0624)

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU **LOCATION, UIC:** Lemoore, 66060

TYPES OF MATERIAL OR AID
Instructor Guides for F/A-18E/F Aircraft
Interactive Electronic Technical Manual System

QTY
REQD
REQD
STATUS
3 Jul 00 Onboard
1 Jul 00 Onboard

#### IV.B.3. TECHNICAL MANUALS

CIN, COURSE TITLE: C-102-9977, F/A-18E/F Avionics Systems (Initial) Organizational Maintenance (Track E-102-0623)

TRAINING ACTIVITY: MTU 1038 NAMTRAU LOCATION, UIC: Lemoore, 66060

QTY DATE **TECHNICAL MANUAL NUMBER / TITLE MEDIUM REQD REQD STATUS** A1-F18EA-580-500 2 Jul 00 Onboard **IETM** Flight Incident Recorder and Monitoring System, System **Schematics** A1-F18FA-600-500 **IETM** 2 Jul 00 Onboard Communication, TACAN, ADF, Electronic Altimeter, and IFF Systems. System Schematics 2 Jul 00 A1-F18EA-630-500 **IETM** Onboard Data Link, Instrument Landing, Radar Beacon Systems, System **Schematics** A1-F18EA-710-500 **IETM** 2 Jul 00 Onboard Global Positioning System, System Schematics A1-F18EA-731-500 **IETM** 2 Jul 00 Onboard Digital Map Set, System Schematics 2 A1-F18EA-740-500 **IETM** Jul 00 Onboard Weapon Control System, System Schematics



A1-F18EA-741-500 Organizational Maintenance System Schematics, Mission Computer System	IETM	2	Jul 00	Onboard
A1-F18EA-742-500 Radar System, System Schematic	IETM	2	Jun 00	Onboard
A1-F18EA-744-500 Forward Looking Infrared System, System Schematics		2	Jul 00	Onboard
A1-F18EA-745-500 Multipurpose Display Group, System Schematics	IETM	2	Jul 00	Onboard
A1-F18EA-770-500 Video Recording and Reconnaissance Systems, System Schematics	IETM	2	Jul 00	Onboard
A1-F18EA-AML-000 Aircraft Technical Documentation List	IETM	2	Jul 00	Onboard



### **IV.B.3. TECHNICAL MANUALS**

A1-F18EA-GAI-000 General Aircraft Information	IETM	2	Jul 00	Onboard
A1-F18EA-MRC-200 Daily Maintenance Requirements Cards	IETM	2	Jul 00	Onboard
A1-F18EA-NFM-000 NATOPS Flight Manual	IETM	2	Jul 00	Onboard
A1-F19EA-SCM-000 Software Configuration Manual	IETM	2	Jul 00	Onboard
A1-FA18EA-746-500 Navigational Infrared Receiving, System Schematic	IETM	2	Jul 00	Onboard
A1-FA18EA-760-500 Tactical Electronic Warfare Systems, System Schematic		2	Jul 00	Onboard
NA 01-1A-509 Aircraft Weapons System Cleaning and Corrosion Control	IETM	2	Jul 00	Onboard
OPNAVINST 4790.2 series Naval Aviation Maintenance Program (NAMP)	IETM	2	Jul 00	Onboard
SAME Automated Maintenance Environment (AME) User's Manual	IETM	2	Jul 00	Onboard

CIN, COURSE TITLE: C-102-9978, F/A-18E/F Avionics Systems (Career) Organizational Maintenance (Track E-102-0624)

**TRAINING ACTIVITY:** MTU 1038 NAMTRAU LOCATION, UIC: Lemoore, 66060

TECHNICAL MANUAL NUMBER / TITLE	MEDIUM	QTY REQD	DATE REQD	STATUS
A1-F18EA-600-500 Communication, TACAN, ADF, Electronic Altimeter, and IFF Systems, System Schematics	IETM	2	Jul 00	Onboard
A1-F18EA-731-500 Digital Map Set, System Schematics	IETM	2	Jul 00	Onboard
A1-F18EA-740-100/110 Weapon Control Systems, Principles Of Operations	IETM	2	Jul 00	Onboard
A1-F18EA-740-500 Weapon Control System, System Schematics	IETM	2	Jul 00	Onboard



# **IV.B.3. TECHNICAL MANUALS**

A1-F18EA-741-500 Organizational Maintenance System Schematics, Mission Computer System	IETM	2	Jul 00	Onboard
A1-F18EA-742-500 Radar System, System Schematic	IETM	2	Jul 00	Onboard
A1-F18EA-744-500 Forward Looking Infrared System, System Schematics		2	Jul 00	Onboard
A1-F18EA-745-500 Multipurpose Display Group, System Schematics	IETM	2	Jul 00	Onboard
A1-F18EA-LWS-000 Airborne Weapons/Stores Loading Manual	IETM	2	Jul 00	Onboard
A1-F19EA-SCM-000 Software Configuration Manual	IETM	2	Jul 00	Onboard
A1-FA18EA-760-500 Tactical Electronic Warfare Systems, System Schematic	IETM	2	Jul 00	Onboard



# **PART V - MPT MILESTONES**

COG CODE	MPT MILESTONES	DATE	STATUS
DA	Achieved Milestone II Decision	FY00	Completed
DA	Performed DT	FY01	Completed
DA	Performed F-18 Demonstration	FY01	Completed
TSA	Conducted analysis of MPT requirements	FY01	Completed
TSA	Developed Initial NTSP	Dec 01	Completed
DA	Stand up ILS CVN 68	Sep 02	Completed
DA	Stand up ILS NAS Lemoore	Nov 02	Completed
TSA	Developed Draft NTSP	Jan 03	Completed
DA	Stand up ILS CVN 70	Feb 03	Completed
DA	Stand up ILS CVN 63	Sep 03	Pending
DA	Begin Fleet Training	FY03	Pending
DA	Perform OPEVAL	FY03	Pending
DA	Achieve Milestone III Decision	FY03	Pending



### PART VI - DECISION ITEMS / ACTION REQUIRED

**DECISION ITEM OR ACTION REQUIRED** 

COMMAND ACTION DUE DATE STATUS

No decision items or actions are pending



greenkl@navair.navy.mil

# **PART VII - POINTS OF CONTACT**

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL	TELEPH	IONE NUMBERS
CAPT John Chase Deputy Aviation Maintenance Programs CNO, N781B john.chase@navy.mil	COMM: DSN: FAX:	(703) 604-7747 664-7747 (703) 604-6972
LCDR Peter Courtney SHARP Requirements Officer CNO, N780C1 peter.courtney@navy.mil	COMM: DSN: FAX:	(703) 695-2565 224-2565 (703) 695-3066
AZC Daniel Burlile NTSP Manager CNO, N789H7 daniel.burlile@navy.mil	COMM: DSN: FAX:	(703) 604-7709 664-7709 (703) 604-6972
LCDR Jim Arend Aviation Manpower CNO, N122C1 n122c1@bupers.navy.mil	COMM: DSN: FAX:	(703) 695-3323 225-3323 (703) 614-5308
CAPT Mike Disano Professional Development Division Director CNO, N00T3 mike.disano@navy.mil	COMM: DSN: FAX:	(703) 602-5172 332-5172 (703) 602-5175
Mr. Robert Zweibel Human Performance and Acquisition Assessment Division CNO, N00T46 robert.zweilbel@navy.mil	COMM: DSN: FAX:	(703) 602-5151 332-5151 (703) 602-5175
Ms. Sharon Wright TAC RECCE Program Manager NAVAIR, PMA265SW wrightsj@navair.navy.mil	COMM: DSN: FAX:	(301) 757-7614 757-7614 (301) 757-7613
Mr. Dennis Kent IPT Lead, SHARP NAVAIR, PMA265DK kentdc@navair.navy.mil	COMM: DSN: FAX:	(301) 757-7612 757-7612 (301) 757-7613
Mr. Ted Turner DAPML, Tactical Reconnaissance NAVAIR, PMA265TT turnerte@navair.navy.mil	COMM: DSN: FAX:	(301) 995-4157 995-4157 (301) 757-7613
AZCM Kevin Green Training Systems Manager NAVAIR, PMA205B1 greenkl@navair.navv.mil	COMM: DSN: FAX:	(301) 757-8120 757-8120 (301) 757-6941



#### **PART VII - POINTS OF CONTACT**

NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL TEL	EPHONE NUMBERS
---	----------------

 Ms. Suzanne Kanelopoulos
 COMM:
 (301) 757-4033

 Logistics Manager, SHARP
 DSN:
 757-4033

 NAVAIR, AIR 3.1.1
 FAX:
 (301) 342-4474

kanelopouls@navair.navy.mil

 CDR Mike Hohl
 COMM:
 (757) 836-0085

 Aviation NTSP Point of Contact
 DSN:
 836-0085

 COMLANTFLT, N71
 FAX:
 (757) 836-6737

hohlmj@clf.navy.mil

CAPT Pat SalsmanCOMM:(757) 863-6495Branch Head, Training Requirement and AssessmentsDSN:863-6495COMLANTFLT, N72FAX:(757) 863-6794

salsmancp@clf.navy.mil

 Mr. Bob Long
 COMM:
 (808) 471-8513

 Deputy Director for Training
 DSN:
 471-8513

 COMPACFLT, N70
 FAX:
 (808) 471-8596

longrh@cpf.navy.mil

**CAPT Robert Holland**Deputy Assistant, Chief of Naval Personnel for Distribution

COMM: (901) 874-3529

B82-3529

FAX:

FAX:

FAX:

(901) 874-2606

(901) 874-2642

(901) 874-6471

NAVPERSCOM, PERS-4B p4b@persnet.navy.mil

**CDR Dave Nelson**Branch Head, Aviation Enlisted Assignments **COMM:** (901) 874-3691 **DSN:** 882-3691

NAVPERSCOM, PERS-404 p404@persnet.navy.mil

 CDR Rose Wynne
 COMM:
 (901) 874-6218

 Aviation Department Head
 DSN:
 882-6218

NAVMAC, 30 rosemary.wynne@navy.mil

 Ms. Susan Webb
 COMM:
 (901) 874-6242

 NTSP Coordinator
 DSN:
 882-6242

 NAVMAC, 30
 FAX:
 (901) 874-6471

susan.webb@navy.mil

Mr. Brett Hollowell COMM: (757) 444-2269 ext. 3225

Management Analyst Integration Branch

NETC, N7C124

DSN: 564-2269 ext. 3225
FAX: (757) 445-8082

brett.hollowell@cnet.navy.mil

 Mr. Steve Berk
 COMM:
 (850) 452-8919

 NTSP Distribution
 DSN:
 922-8919

 NETC, ETS-23
 FAX:
 (850) 452-4853

stephen-g.berk@cnet.navy.mil



kresgej@navair.navy.mil

#### **PART VII - POINTS OF CONTACT**

#### NAME / FUNCTION / ACTIVITY, CODE / INTERNET EMAIL TELEPHONE NUMBERS

MAJ Robert J. Turpin, USMCCOMM:(850) 452-9790 ext. 135Marine Integration Team LeaderDSN:922-9790 ext. 135CNATT, N55FAX:(850) 452-3262maj-robert.turpin@cnet.navy.mil

 LCDR Rick Lawson
 COMM:
 (757) 444-5087 ext. 3354

 NTSP Manager
 DSN:
 564-5087 ext. 3354

 COMOPTEVFOR, 533
 FAX:
 (757) 444-3820

 lawsonr@cotg.navy.mil
 FAX:
 (757) 444-3820

Mr. Dave Turner COMM: (301) 862-3092 ext. 557 SHARP LMI / Maintenance Planning DSN: NA

Ketron, Bionetics FAX: (301) 863-5763

dturner@ketron.com

Ms. Nancy VanDeven COMM: (301) 862-2317

SHARP WBS, CM, ILS Documents

EDO Corporation

DSN:

FAX: (301) 863-1238

EDO Corporation FAX: (301) 863-1238 vandeven@mtech.net

Mr. Phil Szczyglowski

Manpower and Training Analysis Division Head

DSN: 757-8280

NAVALD ALD 2 44

NAVAIR, AIR 3.4.1 FAX: (301) 342-7737 szczyglowspr@navair.navy.mil

 Mr. Bob Kresge
 COMM:
 (301) 757-1844

 NTSP Manager
 DSN:
 757-1844

 NAVAIR, AIR 3.4.1
 FAX:
 (301) 342-7737

 ATC Jeff Rocheteau
 COMM:
 (301) 757-8292

 NTSP Coordinator
 DSN:
 757-8292

 NAVAIR, AIR 3.4.1
 FAX:
 (301) 342-7737

NAVAIR, AIR 3.4.1 FAX: (301) 342-773 rocheteaurj@navair.navy.mil

 ATC Patrick Cortez
 COMM:
 (301) 757-8788

 MPT Analyst
 DSN:
 757-8788

 NAME AND 2.4.4
 TAX:
 (204) 240-7727

NAVAIR, AIR 3.4.1 FAX: (301) 342-7737 cortezpg@navair.navy.mil